

# Little Penguin

*Eudyptula minor*

PHILLIP ISLAND  
NATURE PARKS  
nature  
notes

## The smallest penguin of them all!

Phillip Island (Mallowl) is home to the largest colony of little penguins, consisting of approximately 40,000 penguins found on the Summerland Peninsula. With 18 species of penguins found throughout the world, the little penguin is not only the smallest, but also the only penguin with blue and white feathers.

Little penguins are seabirds that don't fly, they breed on land but forage at sea. They use their well adapted wings as flippers for swimming and deep diving in the ocean. They have a beak, small feathers and weigh approximately 1kg.

## A day in the life of a little penguin

Adult little penguins from Phillip Island can spend over four weeks out at sea fishing in the Bass Strait and Port Phillip Bay. They prey on young barracouta, anchovies, red cod, warehou and pilchards. They also eat interesting things like squid and even sea jellies.

Penguins can eat about 25% of their body weight (approximately 250g) daily. During the breeding season, little penguins are what the scientists call 'central place feeders'. Once finished hunting for food, they return to their burrow on land, a central place to feed their chicks.

Before coming to land, these seabirds gather offshore in groups called 'rafts'. These groups wait until dusk to come to shore and cross the beach to avoid birds of prey predators such as pacific gulls and sea eagles. Once ashore they remain in groups as they waddle familiar tracks back to their burrow. Along the way, they look for landmarks or listen to a partner calling to help them find their way home.

## Life on land — Breeding

Little penguins spend approximately 80% of their lives in the ocean, coming ashore only when it is necessary to maintain their burrows, breed and raise young, as well as to moult their old feathers.

Male penguins are slightly heavier and have a bigger beak with a more defined hook than females. Both male and female penguins will build and maintain their burrow, lining it with vegetation. Most penguins renew the pair bond each season, although research shows they have a divorce rate of 18%. Pairs are more likely to divorce if they haven't successfully raised chicks that breeding season. Which is usually between August to February with females laying two eggs, each weighing 55g, white in colour and approximately the size and shape of a chicken egg.

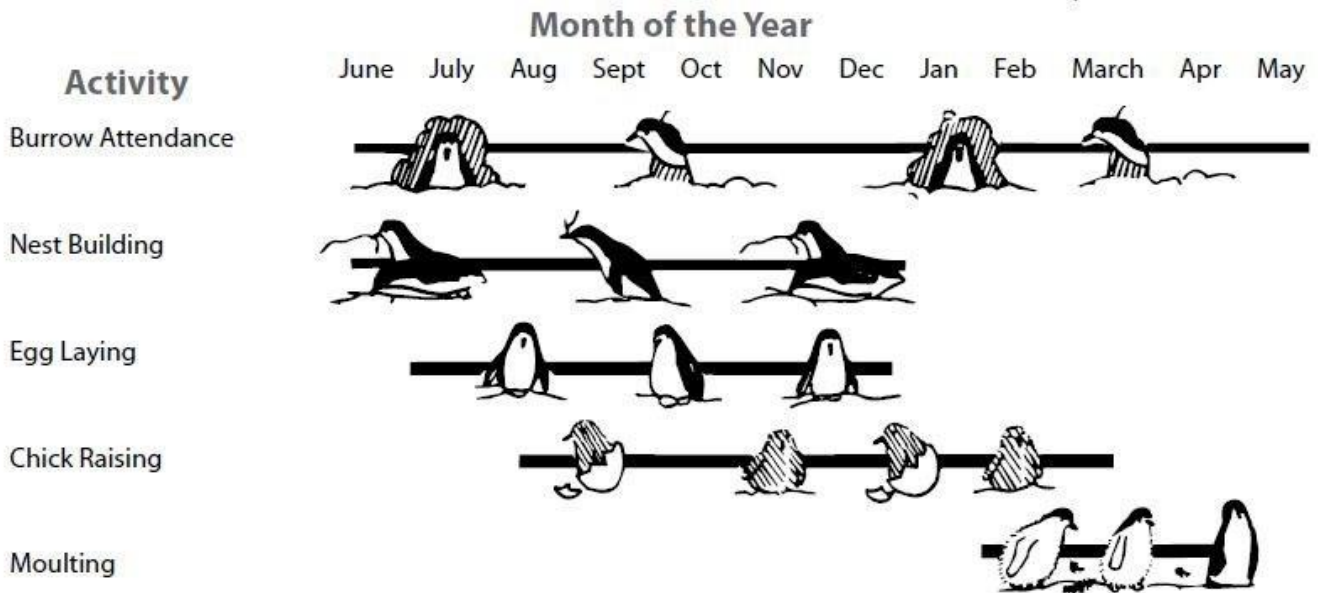


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## Yearly cycle



Both parents take it in turns to incubate the eggs and after approximately 35 days the eggs will hatch. The parents will take turns staying with their chicks until they are two weeks of age, feeding their chicks by regurgitating food caught at sea. At approximately two weeks of age, the chicks are left on their own while their parents continue bringing food back, returning as often as possible to feed them. Chicks will try to get food from any adult they come across. It is unknown whether they don't recognise their parents or they are just trying to be sneaky and get extra food. Parents can recognise their chicks by their piping chirps and position near their burrow. When chicks are around eight weeks of age, they leave their nests behind and head out to sea for the first time. Parents don't teach the chicks how to survive so they have to learn to swim and catch food instinctively by themselves. In their first year of life, penguins travel further than adults, reaching as far as South Australia. They will return to the colony when they are one year of age and will begin breeding from two to three years of age.

## Life on land — Moulting

Little penguins moult between February and April, staying ashore for approximately 17 days. They can double their body weight to have enough reserves while fasting on land. Penguins moult to replace their old and worn feathers so they can maintain a waterproof plumage. Waterproof feathers also trap a layer of air between the penguin's body and feathers, which keeps them warm and buoyant. Without this buoyancy they could drown.



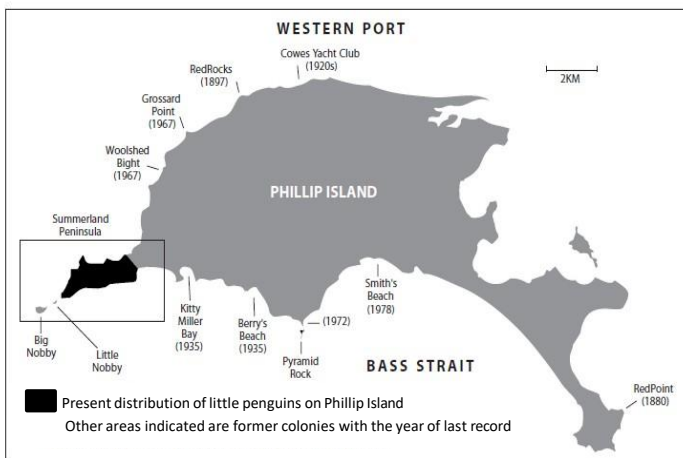
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## The history of penguins on Phillip Island (Millowl)

Before European settlement, ten individual little penguin colonies existed around Millowl. With the construction of roads, infrastructure, housing and land clearing, as well as introduced species like foxes and feral cats, nine of these colonies disappeared over time.



The last remaining colony was on the Summerland Peninsula, where the numbers of little penguins were also on the decline, due to an established housing estate, along with unmanaged tourism and introduced animal species. In 1985 the Victorian Government initiated a 30-year scheme to buy back all of the houses and land within the Summerland Peninsula, called the *Penguin Protection Plan*. With the last house removed in 2010, dedicated rangers of Phillip Island Nature Parks have worked at rehabilitating the area for the little penguins by placing wooden penguin boxes throughout the colony, implementing a fox eradication program, removal of plant weed species and replanting with native vegetation that is ideal for this species. Tourism has also been better managed with capped visitor numbers, raised boardwalks, the latest lighting technology to reduce any negative effects of artificial lights, structured visitor seating areas and the latest research used to educate visitors.

## Research is the key!

Phillip Island Nature Parks is a self-funded organisation that protects and manages approximately 20% of Phillip Island (Millowl), including the Summerland Peninsula. The money raised through tourism goes towards helping to protect a variety of flora and fauna through environmental management, education, operations and research. By discovering all we can about little penguins, we not only provide a great resource of information, but can work at protecting them on land and in the ocean. This information also helps other species as penguins are a great indicator of our ocean's health.



Little penguins have threats as part of their natural life like predatory birds, leopard seals and long nosed fur seals, as well as the hardship of life at sea. However, the threats introduced by humans pose the biggest problem for them. Oil spills, foxes, feral cats, commercial fishing, plastic pollution and climate change have all had negative effects on the little penguin population. By conducting research in these areas and understanding threats, Phillip Island Nature Parks is trying to decrease these human impacts to allow the little penguin colony the greatest chance of survival.

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I have a salt gland above my eyes (supraorbital gland) that extracts the salt in my blood from the seawater I ingest. I then secrete the salt by-product as brine by sneezing or flicking it out of my nostrils.

I have three eyelids: one at the top, one at the bottom and one clear membrane that I use like goggles underwater. My eyes are more sensitive to the blue/green light spectrum as they have adapted to the underwater world, where I hunt.

It may not look like I have ears, but I do! I have specialised hearing and can locate my mate and chicks through hundreds of other penguin voices.

My beak is 3–4cm long and has a curved hook on the end to help catch fish. The depth of my bill can indicate what sex I am:

Males Over 13.3mm depth  
Females less than 13.3mm depth

My blue and white feathers are for camouflage in the water. Flying predators cannot see against the blue of the ocean and marine predators cannot see against the white of the light reflecting on the water.

I can dive 1300–2000 times per day with an average depth ranging from 10–30m. The deepest dive recorded was 72m and dives can sometimes last around 2 minutes. The longest recorded dive is 116 seconds. On average I can swim 8–9km/hr but have been recorded swimming at 12km/hr.

I use my flippers to move through the water, flapping them about 10 times per second when I go fast.

My feathers keep me warm on land and at sea. I have many more than other birds, 12 per cm<sup>2</sup>. They interlock to trap warm air so I am very buoyant and my skin never gets wet. I also have an oil gland near the base of my tail that secretes special oil which I then preen through my feathers, to help keep them waterproof, reduce friction through the water and condition them.

I have sharp claws that help me dig my burrow in soft sand or soil. The burrow, which is approximately a metre deep with a bowl at the end, is then lined with vegetation to make it more comfortable.

I have dense bones and I waddle with a low centre of gravity so I can climb easily. When I 'waddle' I use little energy as my knees are bent up in my body cavity. When I lean forward and rock side to side my legs simply follow.

