

PROTECTING MANLY'S PENGUINS

NATIONAL PARKS AND WILDLIFE SERVICES VOLUNTARY PENGUIN WARDEN PROGRAM

CONFERENCE PRESENTATION

WEDNESDAY JULY 23RD 2008



BACKGROUND:

LITTLE PENGUINS – *EUDYPTULA MINOR*

- Manly's Penguin Colony
 - Penguin life Cycle can Breeding
 - Endangered Population Declaration
 - Manly's colony breeding sites
- Penguin Warden Scheme and its inception
 - Aims of Penguin Warden Scheme
- Conclusion of Breeding Season – De-Brief

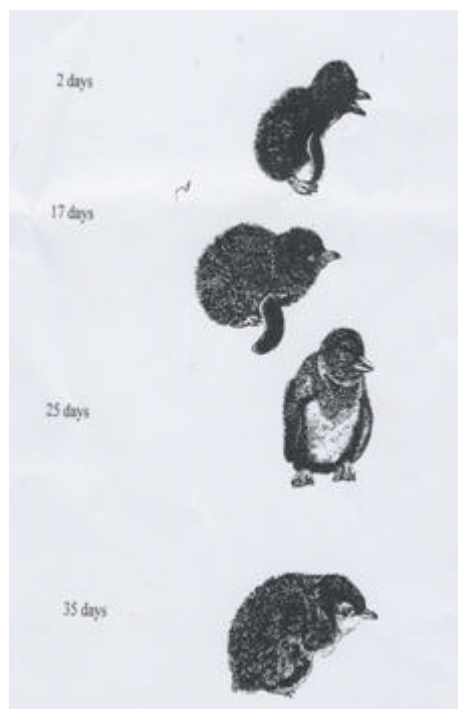
○ **Little Penguins – Size, Colour, Distribution and Habitat**

- Size: Smallest of world's 17 penguins – 40 – 45cms tall, weight adult bird 1 – 1.2 kg – Male slightly larger than female
- Shape and colouring: Streamlined body, wings modified flippers. Feathers dense and waterproofed.
- Feathers blueish with white breast and underbelly, grey beak and blue/grey eyes. Beaks slightly different with each sex, males shorter and broader than females
- Found Southern edge of mainland Australia, Tasmania, New Zealand (Chatham Islands off NZ coast). Temperate water.
- Lives and feeds in inshore waters around coast and breeding islands. Burrows found in rocky outlets, debris, pipes, and caves and in sand dunes. Like to have burrows above sea level and some shrubbery to hide entrances to burrows. Do not like direct sunlight into burrows
- Feeds between dawn and dusk, catches small shoals of fish eg pilchards, anchovies and small crustaceans. May be seen during day on rocks, but out at sea mainly. Can travel considerable distances – 15 – 20 kms per day, some noted to have travelled up to 50kms. In breeding season they don't travel far. Can dive 30 – 50 metres down.

○ **Breeding Cycle**

- Breeding cycle – the Manly colony is between late June to February. Male bird comes in first, prepares nest, and calls for established mate. Generally monogamous but will find another mate if one dies. (the male will mate with another female if nearby but not allow his mate to go with another male) Nest is made from leaves, feathers, pieces of rubbish (even plastic bags) and whatever bird can find to line nest – usually dug down about 15cm into soil/sand
- Comes into land and goes to burrow after sunset, pair may come in together or at differing intervals – up to one hour apart.
- Female lays two eggs – approximately 6 -8 hrs apart, both hatch at same time, after 33-40 days. Male feeds during day, relieves female in evening and brings food for mate whilst on eggs.

- Chicks gradually come out of nest during 6 weeks from hatching – wait for parents to return each evening for feed. Parents take turns to go out to sea for first two weeks, and then they go out together until chicks able to fledge.
- Once waterproofed feathers are through and baby fluff removed – by parents – no longer fed by parents. The fledglings go out after about 7 – 8 weeks, and after 1 – 2 days of the parents ceasing to feed them. Remain at sea for 2-3 years until sexual maturity, will usually return to nesting area where they were hatched and call for a mate.
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Manly Penguin Colony

- Only mainland colony in NSW following destruction of another at Eden on south coast of NSW.
- Known to have been around 500 birds in Manly colony early 20th century
- Many killed in 1954 – for pleasure!
- More killed by dogs in 1995 – only approx 30 breeding pairs remained
- Declared Endangered colony & Critical Habitat by NSW Minister for Environment 1997
- Known to have nests under Manly wharf for approximately 17 years
- Nesting Sites:
- Various Coves and beaches around Manly, including Quarantine, Store and Collins Beaches
- Residential areas under houses and around gardens – often on private property
- Under Manly Wharf and caves around by Federation Point

Recovery Team Data for 2002 & 2007

Nesting sites are monitored each breeding season by contractors for DEC – burrows checked for signs of habitation and if birds on nests plus check for micro chipping or banding of birds. Banding of birds ceased 5 years ago.

Data is entered and reports prepared yearly with public access at 5 yearly cycles.

All incidents of penguins injured or killed from Manly colony reports to NPWS department, A DEC officer is responsible for monitoring the Manly penguin colony. A mortality register is kept at Taronga Zoo, an autopsy is carried out on any dead penguin brought to the zoo.

2007/08 stats – show approximately 60 breeding pairs, 98 active nests, 130 eggs laid, total chicks fledged 104 – 69% breeding success. **These stats are not for public dissemination**

Volunteer Penguin Warden Scheme

- Established for the 2005/6 breeding season following destruction of nests and eggs on a couple of beaches plus predation of penguins by dogs. It was also based on a similar program for an endangered colony of seabirds on the South Coast of NSW, where members of the local community protected and monitored them.
- NPWS called for volunteers from local community and from wildlife carer organisations
- Course held in November 2005 at Quarantine Station by NPWS ranger and DEC penguin specialist. Approximately 20 people attended from communities where penguin nests in close proximity to beaches and residential areas. Coordinators appointed for each area.
- Patrols were commenced over Christmas/New Years and Australia Day public holidays, with wardens giving out information to boaties, fishermen and others using the beaches.
- Manly Wharf and Federation Point became focal points for crowd control over public holidays – penguins were made known in local press and crowds increased. Penguin wardens overwhelmed by

numbers of people, no proper barriers or signage to prevent access to the penguins whilst in their burrows. The Manly Wharf & Federation Point nests are not part of the Critical Habitat and not included in monitoring stats.

- Dog attack on one chick, lead to increased awareness and more wardens involved in nightly watch over penguins at Wharf.

Aims of Volunteer Penguin Warden Scheme

- Patrol of beaches and Penguin breeding areas – prevent dogs being on beaches and unleashed within 50 metres of penguin nesting areas
- Prevent contact with penguins or nesting areas
- Prevent use of flash photography of penguins
- Educate and inform public about penguins and draw attention to Council and NPWS regulations regarding dogs, unleashed near penguin nesting areas or on beaches close to nests, boating, and interference with penguins and fishing

Manly Wharf and Federation Point Penguin Breeding Areas



Manly Wharf Board Walk Nesting Area



Federation Point Boardwalk Nesting Area

Established breeding pairs come to mate and breed each year at these two sites, which are outside of National Parks areas and not included in the current data collected by DEC. They are especially vulnerable due to close proximity to public with little barriers or signage to prevent access by general public.

The volunteer penguin wardens patrol these areas nightly from the beginning of the season when the first penguins are noted to have come back in to their burrows.

Temporary signage and barriers have been erected by volunteers in an effort to protect the birds whilst they are nesting and prevent unleashed dogs and public from getting too close to the birds or disturbing their nests. Permanent barriers and better signage is to be installed when funding is approved.

In August the fences were destroyed at Federation Point and after discussion with the Council, larger, iron fencing was erected.

2007/08 Penguin Breeding Season

- It appeared to penguin wardens to be later than previous seasons – late July before birds came in – cold wet weather
- Penguins late in mating and laying of eggs
- One nest at Federation Point disturbed by fishermen, female abandoned eggs following consecutive nights when partner unable to return to nest due to disturbances.
- Manly wharf season also delayed, established breeding pair had first clutch in late September. Female bird thought to be at end of breeding cycle – approximately 7 years old, has metal tag on one wing – known as Mrs Silverwing.
- Adolescent male arrived at Wharf, (? Son of established pair) called for mate, began mating with unknown female, unsuccessful in mating Female partner disappeared, no other partner found. Established breeding pair aggressive towards this male and chased him away from nests frequently. The adolescent moulted early and returned to sea early on in season
- Second clutch of chicks born January, mother penguin appeared tired and did little feeding of chicks. By February mother fed only briefly, father did not return for two nights, mother not seen for one night. Mother may have begun moulting early and did not have enough reserves to feed chicks. Chicks two weeks from fledging, very hungry.
- Parents also appeared to be moulting – building up fat supplies whilst confined to nest – unable to go out to sea until new waterproofed feathers in place.
- DEC contacted re action if parents not returning to feed chicks – advised to collect chicks and take to Taronga Zoo to be cared for until able to be released.
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- Chicks successfully collected and taken to Wildlife Clinic at Zoo.

**Two Chicks in container overnight
before transportation to Wildlife
Clinic**

Conclusion of 07/08 Season

Penguin Chicks fattened up and released two weeks following capture, taken to nesting box at nearby Store Beach and released next day, successfully went out to sea.

Parents went out to sea following moulting – remained under wharf until early April

Federation Point penguins had one clutch only and left early following moulting.

New season has commenced, approximately 4 penguins possibly five seen at Federation Point, actively mating.

DeBrief Session with NPWS and Manly Council

- Adequate barriers and signage for crowd control specially over public holidays and high season
- Adequate uniforms for both winter and summer
- Support from Manly council rangers and NPWS officers
- Management of unleashed dogs and recalcitrant dog-owners – education and fines
- More training for wardens
- Information leaflets for public about penguins

Since the inception of the penguin warden scheme, the number of successful fledging of chicks increased in 06/07 and 07/08 seasons

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Manly Volunteer Penguin Wardens – special Penguin Promotion Weekend at Corso

Paper's author:

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- Member of Roadkill Prevention Committee Northern Beaches
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- Volunteer NPWS Manly Penguin Warden program