Vertebrate Pest Management Koala Beach Estate



March 2019

Introduction

This report provides detail on vertebrate pest management actions at Koala Beach Estate that have been implemented during the period November 2018 to March 2019. Actions proposed for the remaining months of 2019 are also included.

The primary aims of annual vertebrate pest management programs at Koala Beach (inclusive of residential areas and adjoining bushland areas) are to:

- conserve protected and threatened flora and fauna species;
- fulfil legislative obligations under the NSW *Biosecurity Act* 2015.

Vertebrate pest management programs are undertaken in general accordance with the Overall Management Guidelines (BRS 2009) and Revised Koala Beach Habitat Restoration Plan (BRS 2015).

Site selection for on-ground control works

Vertebrate pest control on the Tweed Coast presents unique challenges because there are residential areas right next door to bushland. Pest management programs require a range of lethal control technologies, not just one method. The safety of nearby residents and their pets are key considerations. Because safety is so important each control program has a high level of safety measures. Selecting an appropriate site for the work is also a key consideration.

Some control technologies, such as 1080 baiting, have legal restrictions that specify how far from residential dwellings a bait can be laid. Compliance with the Pesticide Control Order for 1080 (2010) therefore prohibits 1080 baiting on Council managed lands at Koala Beach Estate.

Other control technologies, such as soft-jaw trapping, can be legally used in Council managed bushland adjacent to the Koala Beach Estate e.g. wild dog or fox management

In most cases, however, Council staff would much prefer to use soft jaw trapping further away from human habitation for safety and to minimise opportunities for members of the community to interfere with control sites.

Most pest species are highly mobile. Camera data collected and analysed since 2013 has allowed Council staff to work out clear movement patterns of pest species between Council managed lands at Koala Beach Estate and neighbouring rural properties.

Council staff have gained permission from some neighbouring rural landholders who are willing to allow Council to implement pest animal monitoring and management on their land. As such, non-reactive programs using lethal technologies are implemented on the rural lands surrounding Koala Beach Estate, as this allows a larger buffer between residential areas and the lethal control technologies that are essential tools for pest animal management. These works directly benefits the residents and bushland areas of Koala Beach Estate.

On-ground management activities for 2019

Vertebrate pest management programs that will be implemented in 2019 are outlined below.

Camera monitoring

Camera monitoring is a key part of implementing a cost-effective pest animal management program. Camera monitoring results guide on-ground control works, and provide data that allows the effectiveness of management activities to be measured.

Currently, five fixed location cameras are used to monitor pest animals in and around Koala Beach Estate. These cameras are checked at 30-day intervals by a contractor, who then analyses camera data to assess if on-ground management activities are required.

Fox control

Fox management for the bushland areas associated with Koala Beach Estate is in alignment with the NSW Office of Environment and Heritage's fox control guidelines for protecting threatened ground-nesting birds. Targeted and sustained control is implemented for foxes within a 4km buffer around known Bush Stone-curlew nests at Koala Beach Estate (centred at Bunya Avenue). This 4km buffer coarsely correlates to home ranges of two foxes (Paul Mahon, pers. comm. 2015).

The range of control measures that are implemented for fox management in the 4km buffer around Koala Beach Estate are included below.

1080 baiting

Monitoring efforts initiated in November 2018 indicated that there was a population of foxes across the project area and that there was a need to establish a control program using 1080 baits/ejectors to reduce the impacts of foxes on local native fauna.

To reduce the risk to human safety, and the cost associated with legislated notification requirements for 1080 ground baiting (i.e. notifying all property owners within 1km of a baiting site), 1080 baiting was implemented on participating private properties adjacent to Koala Beach Estate.

Baiting was conducted over a three-week period (3 December - 21 December 2018) and focussed on areas with significant fox activity. Baits were checked and replaced twice weekly. 1080 fox baits were used and stored in accordance with the Pesticide Control (1080 Liquid Concentrate and Bait Products) Order.

Ten baits were taken by foxes during the baiting period. It is possible that the effectiveness of the baits was reduced during week three by a period of high rainfall. All of the baiting sites were closed prior to the Christmas holiday period and no baiting was not conducted during the school holiday period.

Soft-jaw trapping

No soft jaw trapping has been implemented this year to date. Soft-jaw trapping will be employed as a management technique if camera monitoring shows 'bait shy' foxes are frequenting the monitoring locations. In combination with 1080 baiting and fox den fumigation, trapping provides a good fox control option at key time's (i.e. critical times for native fauna).

Fox den searches and fumigation

Searches for new fox dens and monitoring of previously known den sites will be undertaken between July and December. This is to ensure early identification of potentially active dens and allow for monitoring to identify when cubs are present. Known den sites will be inspected, at least 4 weeks apart, to determine if they are active and if fumigation is warranted. Only active natal dens will be fumigated.

Wild dog and cat control

No cats and very low numbers of wild dogs have been recorded this year in the bush and farmland areas surrounding Koala Beach Estate.

In the event that wild dogs and/or cats are frequently recorded on remote cameras, a soft jaw trapping and/or cage trapping program will be implemented over a minimum two week period. If concentrated reports of wild dog incursions into urban areas of Koala Beach are reported, additional monitoring will be implemented to assess the need for reactive control works.

Rabbit control

Council continues to offer the service of rabbit trap hire, plus free rabbit euthanasia through King Street Vet clinic at Murwillumbah, for Koala Beach residents who find un-owned rabbits roaming into their yards. The numbers of calls to Council concerning feral/stay rabbits has dropped dramatically over the last 12 months. Only two rabbits were trapped and euthanised from Koala Beach during 2018, which is considerably lower than previous years. There have been no requests for rabbit traps at Koala Beach to date in 2019.

Hare numbers appear to be increasing, not just in the Koala Beach project area but across the entire Tweed Coast. Hares are not a declared pest (unlike wild rabbits) but will be considered in future pest management planning across the Tweed Coast, inclusive of Koala Beach.

The following works will be implemented to monitoring and control rabbits and hares at the Koala Beach Estate during 2019.

- 1. Continue to maintain a rabbit trap and euthanasia service to Koala Beach residents.
- 2. Engage a contractor to survey and report on wild rabbit and hare abundance in the Koala Beach Estate. This survey will be used to determine if the wild rabbit population has dropped dramatically or if there is a reduced level of interest in trapping by Koala Beach residents.
- 3. Should wild rabbit and/or hare numbers warrant wide spread control, control measures will be explored. Suitable management options for rabbits and hares will take into consideration risks to non-target fauna and resident safety associated with control methods.

Cane Toad management

Wollumbin Environmental Services were contracted from July 2018 to June 2019 to continue restoration works around stormwater detention ponds at Muskheart Circuit, Sassafras Street and Sugar Glider Drive to exclude cane toads and improve habitat quality for native fauna.

Although progress has been slow, the restoration works are achieving positive results, with the wildlife habitat gradually improving at these sites.

To support the habitat restoration works, there is an opportunity to purchase a Cane Toad trap (Toadinator) from Animal Control Technologies if there is sufficient interest shown for using the trap by residents of Koala Beach. The trap unit will cost around \$400.

The Toadinator cane toad trap is compact, lightweight, portable and easy to assemble. The trap has been specifically designed to attract and trap cane toads using proven finger door technology and a solar powered, self-charging light and sound attractor unit that can attract toads.

The Toadinator when combined with the attractor unit is effective in a range of environments including residential and high use public areas. It has been rigorously field tested by leading research staff at James Cook University.

Community cage trapping

Council has cage traps for a number of species that are available to loan to residents. If you have Indian Mynas, cats or rabbits visiting your yard, please contact Council and organise to borrow a trap.