# Pollack Wetland Enhancement Project 2019/20 Fox Control Program



The fox baiting program commenced 20<sup>th</sup> January 2020 ran for 10 weeks and was completed 30<sup>th</sup> March 2020. A total of 20 bait stations were established, 15 locations previously used by Forestry Corporation of NSW (FCNSW) and an additional 5 new stations on the eastern side of the main swamp (16-20 see Figure 1). The bait stations were inspected twice a week weather permitting to replenished baits when taken. The operation was conducted by experienced and accredited staff of Moama Local Aboriginal Land Council with baits buried to avoid attracting native animal and bird species; all baits were removed and buried at the completion of the program.

The baiting program (funded through the Murray Local Land Services and the Australian Governments National Landcare Program) was combined with the existing FCNSW program within Koondrook-Perricoota and Campbell's Island forests and designed to extend the period of baiting at the Pollack through the turtle nesting and hatching season.



Figure 1: Map indicating the location of 1080 bait stations and ejectors

## **Bait uptake**

Bait take/replenishment was recorded at each bait station. During effective baiting programs bait replenishment would be expected to start low and increase as bait stations were discovered by foxes before reducing as foxes are destroyed. The bait stations located along the western boundary and

Pollack lagoon required the most replenishment. Bait replenishment peaked in weeks 3 and 4 with 30 baits taken in 14 days. This equates to 52% of the total 57 baits laid during the 10 week program. Following this periods bait replenishment dropped to 2-3 baits across the site per visit; the reasons for this dramatic reduction are discussed in the following section.

## **1080 Ejectors**

Photographs recorded on motion sensor cameras showed two identifiable foxes had remained a present at the Pollack for over twelve months indicating these two animals were not ingesting the baits. A decision was made to target these specific animals through the use of 1080 ejectors.



Figure 2: Diagram of a 1080 ejector

1080 ejectors are baited, spring-activated devices that propel the contents of a capsule (1080) into the mouth of a fox or wild dog as it pulls upwards with sufficient force on a baited lure head. 1080 ejectors offer some benefits to buried baits, these include; they are target specific as only large animals with sufficient strength can activate the device; they can be used as sentinel stations as ejectors can be set for long periods in the field as the 1080 is protected within a sealed capsule and they cannot be moved or cached resulting in less risk to non-target animals.

Two baits stations with high bait replenishment rates were selected to replace buried bait with a 1080 ejector. Motion senor cameras were installed to cover the ejectors to record what animal species visited the ejectors and when baits were taken. Animals recorded visiting the ejectors included; Australian magpie, White-winged chough, Common Brushtail possum, Eastern grey kangaroo, Lace monitor, European fox, and Fallow deer. Foxes were the only animal recorded attempting to remove the bait. One ejector was relocated as no animals were recorded on the camera visiting the initial location.

Following deployment of the two 1080 ejectors neither of the two resident foxes has been recorded on any motion sensor camera across the site indicating both animals were successfully destroyed. Bait replenishment also reduced from a peak of 30 baits during weeks 2 and 3 to 2-3 baits per visit. This possibly indicates these two animals were responsible for most of the bait taken however; they were caching the baits and not ingesting them, a practise common to foxes.

Although the motion sensor cameras captured a great many photographs none showed a fox in the process of taking ejector baits. Figure 3 below shows a fox at one of the ejector sites and the bait still in situ. Close inspection shows the fox has open jaws and a raised paw, possibly after attempting to remove the bait, triggering the ejector and being sprayed in the mouth with 1080. Figure 6 taken a few minutes later, shows the fox still present and the bait removed indicating that despite triggering the ejector and being sprayed at the first attempt, the fox immediately returned and removed the bait.

For the month following completion of the fox baiting program at the end of March no foxes have yet been recorded on any of the six motion sensor cameras diploid at the Pollack. Previously there

has been at least a couple of recording a week. This indicates the combination of buried baits and strategically located 1080 ejectors produced an improved result to previous years.



Figure 3: Photo 1 taken at 3:53am with a fox present and showing the bait still in place



Figure 4: Photo 2 taken at 3:59am showing the fox is still present and the bait has been removed

#### **Additional Data**

During ecological monitoring of 2019/20 environmental watering event a young Eastern long-necked turtle was recorded at the Pollack lagoon. Measuring only 84mm in shell length, the presence of this juvenile indicates successful breeding has occurred within the past few years at the Pollack lagoon. Consecutive, annual delivery of environmental water since 2015 has re-established the lagoon to natural, permanent water. This together with the annual fox baiting program, maybe contributing to



an improvement in the survival rates of turtle nests and young hatchlings. Targeted surveying to establish the turtle population would indicate the proportion of young animals.





Figure 6: Graph showing the number of baits replenished each visit

#### Table 1: Location of bait stations

Site Code	FCNSW	Easting	Northing
	Code		
1	62	241005	6063160
2	61	240966	6062889
3	60	240983	6062595
4	59	240895	6062280
5	58	240870	6062020
6	57	240735	6061882
7	56	240672	6061493
8	55	240639	6061222
9	54	240591	6060878
10	53	240547	6060566
11	52	240721	6060487
12	52A	241230	6060818
13	53A	241532	6061069
14	54A	242012	6061168
15	55A	242123	6061486
16		242460	6060611
17		242680	6060195
18		242828	6059749
19		242845	6059325
20		242510	6059163
Ejector 1		240547	6060566
Ejector 2A		242030	6060981
Ejector 2B		240870	6062020

Fox	Baiting	Sites	Locations:	Datum	H55	GDA94