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Effects of 1080 Fox Baiting on Non-Target Species

Nick Mooney, Wildlife Biologist and adviser to the Fox Free Taskforce, reported in 2003 on research into the 1080 fox baiting technique to improve its non-target safety.

See the latest [update](#) on the fox baiting program.

Minimising the effects of 1080 fox baiting on wildlife, and minimising the effects of wildlife on baiting (loss of baits to wildlife), are important considerations when baiting foxes in Tasmania. Human safety and killing foxes are clearly the priority issues when designing a baiting program, however avoiding killing wildlife is also important.



Eastern Bettong

Our trials used dried kangaroo meat (a proven fox bait) containing small amounts of 1080 poison sufficient to kill an adult fox, yet low enough that native animals would need to consume multiple baits (for example, devils would need up to 15) within several days to be in danger. Baits were dispersed widely and a special marker dye was added to help in identifying their fate. Each bait was buried 10-15cm in the ground, so that few native animals could find them, yet a fox, with its super-sensitive nose, still could.

Monitoring of bait sites indicated a very low rate of baits taken (less than 1%), although it's interesting to note that evidence at several bait takes showed signs of foxes (the way the bait had been dug up, for instance). Scouting around bait sites found no wildlife killed by the 1080 fox baits. Numerous devil and quoll scats were also examined, yet few showed any traces of the bait marker dye. Considering the very low number of baits taken overall, there could not have been any serious harm done to wildlife populations.



Bettong Trapping

In an effort to test other baiting methods, we began using another type of bait, known as Foxoff®. We quickly found that a greater variety of wildlife would eat Foxoff than would (or could) eat the dried kangaroo meat baits. Key amongst these was the Eastern Bettong, a small omnivorous macropod now extinct on the mainland, primarily due to foxes.

To understand the impacts of fox baiting upon bettongs, a study was set up at Epping (a well known bettong 'hotspot') using Foxoff baits. Project assistants Jonah Gouldthorpe and Shaun Thurstans set about catching and ear-tattooing a sample of bettongs at the Epping reserve, and a nearby 'control' site which was not poisoned. The baiting went ahead, then re-trapping was carried out to assess any population changes.

Surprisingly, both populations actually increased over the baiting period. This was most likely due to young bettongs becoming available for trapping by the time the re-trap was conducted - a coincidence that could not be helped. Only a small number of Foxoff baits were taken throughout the trial, probably because the bettongs could not find them, so it's likely very few animals would have been poisoned.

These and other research and monitoring activities are important to help the Taskforce continually refine the 1080 fox baiting program, so that our baiting activities are not only effective at killing foxes, but are not also killing large numbers of the very animals we're trying to protect.

Further information:

Contact: Fox Eradication General Enquiries

Fox Eradication Program

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167 Westbury Road
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**Report fox sightings and any evidence of fox activity to the FOX HOTLINE 1300
FOX OUT (1300 369 688)**



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Fox Baiting Program

See also:

[The effects of 1080 fox baiting on spotted-tailed quolls and Tasmanian devils](#)
[Current and recently completed 1080 fox baiting programs](#)

The Fox Eradication Branch has been set a difficult task – to find and eradicate what is most likely to be an extremely low-density population of foxes. The Fox Eradication Branch and its scientific advisers suspect, from evidence and collective knowledge, that the density of a Tasmanian fox population might be as low as one fox per 500 km².



The location of baits is marked by flagging tape.

Research in other parts of the world shows that once foxes are at a density of one per 25 km² they are almost impossible to find, and once at one per 40 km² the chances of finding them virtually collapse. The scenario in Tasmania, therefore, is extremely unusual and presents many new challenges for any eradication efforts.

Even if the Fox Eradication Branch is unable to find individual foxes, it is their brief to put any foxes that may be present in the State in danger for eradication. Therefore, it was decided to lay baits on a scale that made it highly likely that foxes would be able find them.

Of course, it was also important to establish a baiting regime that endangered foxes but not Tasmanian devils, quolls or any of our other unique wildlife.

To achieve this, the Fox Eradication Branch chose 40 g chunks of dried kangaroo meat (DKM) as bait. This is very hard for most wildlife (including quolls) to eat while dry.

Bait Trials

During trials in Victoria baits were buried to minimise interference from birds, to take advantage of foxes' expertise in finding buried baits and the relative inability of quolls and devils to do likewise. Foxes have evolved to survive harsh winters when most food is hidden by snow whereas devils and quolls never encountered such severe conditions, and therefore never needed to develop this skill.

Through these trials, the Fox Eradication Branch quickly confirmed that foxes start taking such baits as soon as they are laid and also discovered that Tasmanian devils and eastern quolls find few baits, until the baits rot (and smell). Eastern quolls seemed especially unaware of buried baits.

A lot of work has been done on bait-take by Spotted-tailed quolls in Victoria and NSW, and the Fox Eradication Branch did more. The Fox Eradication Branch confirmed that these marsupials are not very interested in dry DKM. This difference between foxes immediately taking baits, and devils and quolls rarely taking them until rotting (usually starting at 1-2 weeks in the ground) provided a practical means of protecting wildlife while endangering foxes.

The poison 1080 is used because of its different toxicity to different species, and because of its biodegradability. This poison has a poor reputation in the State but it is extremely important that the Tasmanian public has access to accurate information about the use of 1080 in fox baits, which differs greatly to the levels and processes used against native browsing animals in other operations.


The active ingredients of 1080 are found in some Australian plants as a natural chemical defence against browsing, and long-term exposure to these plants has resulted in Australian native animals having some resistance levels. This includes native carnivores.

Foxes, on the other hand, evolved in habitats where there is no 1080 in plants, making them

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super-sensitive to the poison in comparison to devils and quolls, which are among the most resistant of all mammals to it.

A species' sensitivity is usually described as its 'LD50', a measure of relative sensitivity defined as the level of poison that needs to be ingested by a species for it to have a 50% likelihood of fatality.

The LD50 for red foxes is 0.14 mg per kilogram of its body weight. This compares to Tasmanian devils, which have an LD50 of 4.24 mg per kilogram, Eastern quolls - 3.7 mg per kilogram, and Spotted-tailed quolls - 1.85 mg per kilogram. Put simply, kilo for kilo, devils are over 30 times as resistant as foxes, Eastern quolls over 26 times and Spotted-tailed quolls about 13 times. 

Another factor to remember is that 1080 breaks down quite rapidly in moist conditions due to fungal and microbe activity. Therefore, its persistence is dependent upon local soils and rainfall. Experiments showed that between the kangaroo meat being dosed and actual use, Fox Eradication Branch baits lost about 10% of their 1080. Breakdown is then rapid, with only 43.3% of the original 1080 being left after one day in the ground, 28.2% after five days, 19.7% after 10 days and only 11.6% after two weeks. In wet conditions breakdown was even greater, less in very dry conditions.

The Fox Eradication Branch chose 2.5 mg of 1080 per bait as the original dose, but quickly moved to 3 mg since the breakdown of 1080 was so rapid. At that level, most animals need multiple baits in a short time to have any problem. Foxes on the other hand usually only need a small part of one bait. In brief, this means by the time devils and quolls can easily find and eat DKM, it has levels of 1080 relatively safe for them.

Research has turned up further safeguards for our native carnivores. Although odourless and tasteless to people, it turns out that some species can detect 1080 in some bait types and therefore avoid eating them. This was observed with Spotted-tailed quoll in NSW but has not been seen for foxes.

Careful research was conducted before the specific baiting regime for the Tasmanian eradication program was decided upon. The Fox Eradication Branch follows strict procedures ensuring that the permission of property owners is granted and all neighbours are fully aware that the program is taking place before the baits are actually laid in the ground.

Landowner Permissions

The first step taken is to contact landowners to discuss the program about to take place, and to ensure agreements to bait with 1080 on the property are signed. An important part of this process is to ensure that the dates for baiting the property are convenient for the landowner - for example, in consideration as to when lambing might be taking place.

When Fox Eradication Branch Field officers lay baits, each bait is marked by flagging tape, generally pink, and the position recorded on a GPS. The baits are spaced between 200 to 250 metres apart, depending on such factors as the lay of the land or whether there are potential 'wildlife corridors' in the area. The Field Officers are also careful to stay away from roads and other boundaries, water and houses.

Letters known as 'Neighbour Notifications' are also sent to all homes in the area of the property being baited to ensure that all persons in the vicinity can take due precautions during the period of baiting. Contact details for the Fox Eradication Branch are also included so that any questions neighbours may have can be personally answered.

Baits are retrieved after 28 days, and taken back to the Fox Eradication Branch storage facility at Prospect until contractors collect them for deep burial.

In addition to the efforts of the Fox Eradication Branch itself, members of the public are asked to remain vigilant. This is particularly important at night when foxes are most active. Please report any sightings or other evidence to the Fox Eradication Branch Hotline. Rural landowners are encouraged to further assist the Fox Free Tasmania program by carefully watching out for foxes, fox dens, prints and unusual animal kills on their properties. It would be a tragedy if this efficient, adaptable predator became established in our State. The Fox Eradication Branch asks for your help, to ensure this never happens.

For further information:

Contact: Fox Eradication General Enquiries

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Media enquiries should be directed to 03 6233 6340.



Report fox sightings and other evidence to the **FOX HOTLINE 1300 FOX OUT (1300 369 688)**



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Foxes, quolls, devils and 1080

Nick Mooney

There has been a recent spate of public concern over the effect that 1080 baiting targeting the red fox *Vulpes vulpes* in Tasmania might have on the spotted-tailed quoll *Dasyurus maculatus* and the Tasmanian devil *Sarcophilus harrisi*.

Considerable research has been done on that quoll species on mainland Australia, studies augmented by work in Tasmania on both it and devils.

Assessing the Risks

When assessing the risks of 1080 fox baiting to individuals or populations of any particular species a number of things should be taken into account, including:

- The physiological sensitivity of the species to 1080 poison (depends on many things principal amongst them the historic exposure of the species to 1080 as it occurs in Australian plants), something that can be experimentally measured.
- How many baits the species might find (depends on the sensory abilities of the animal, how, where and the number of baits placed in a given area – the landscape density).
- How many baits the species might eat within a certain period. To cause death, a lethal dose has to be ingested in a certain time – usually within 2 days because sub lethal doses of 1080 are metabolised. Dried meat baits are too hard for many species to do more than mouth and nibble but many species can eat other baits such as Foxoff (eg non toxic bait trials – Belcher 1998 and DPIW data). There is evidence some species can detect 1080 in baits and avoid eating them (eg the spotted-tailed quoll in Foxoff baits, Kortner et al 2003).
- How much 1080 is left in baits when they are eaten (if they are decomposing, 1080 will have also degraded to a comparable degree).
- The likelihood of the species digesting baits (many carnivores and omnivores regurgitate food containing significant amounts of 1080. There are past records of devils regurgitating 1080-laced food in captive trials).
- The age and health of the individual eating the bait or carcasses of poisoned animals (smaller individuals of a species likely have higher metabolisms and consequent usual higher sensitivity to 1080 and healthy individuals likely have more resistance to 1080)
- The size of individuals in the population at baiting (size effects metabolism and consequent susceptibility to 1080. Individuals of the same species might be different in size in different populations, eg devils on the east coast of Tasmania are much larger than west coast individuals, and there may be many small juveniles just after breeding).
- How the species' range and abundance overlaps with 1080 baiting (the proportion of the species that might be exposed to baiting).

Physiological sensitivity

The level of physiological sensitivity of a species to 1080 is usually described as the species' LD50 - that is the mg of 1080 ingested per kg of animal during a very short period that will kill 50% of the individuals exposed (LD = Lethal Dose). Most of the research on LD50s for Australian animals and the potential impacts of 1080 was done on captive animals decades ago by Dr John McIlroy, then at CSIRO, and published in various issues of Australian Wildlife Research (eg McIlroy, 1981a, 1981b and 1981c) and he still gives occasional advice on the matter to DPIW. It is doubtful if this work could ever be substantially expanded or repeated because it involves lethal testing.

About

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LD50s for some Tasmanian animals of obvious interest as potential non-target consumers of fox baits (mainly dried kangaroo meat but also some Foxoff meat compound) are

Species	LD50 (mg/kg)
Tasmanian devil	4.24
Spotted-tailed Quoll (Tasmanian specimens tested)	1.85
Eastern Quoll	3.7
Tasmanian Bettong	1.0
Brush-tail Possum	0.75
Wedge-tailed Eagle (mainland specimens tested)	9.47
Red Fox	0.14
Dog	0.06

We see that kg-for-kg, red foxes are over 13 times as sensitive to 1080 as are spotted-tailed quolls and 30 times as sensitive as devils. The LD50 for spotted-tailed quolls is lower than might be expected considering those for its relatives, the eastern quoll and Tasmanian devil. McIlroy has expressed the opinion the small sample size and temperatures the results were obtained under may have given a too low result. This is born up by most mainland research that shows little effect of fox and wild dog baiting on spotted-tailed quolls (eg Kortner et al 2003).

Persistence of 1080 in baits

In the field, 1080 breaks down by microbe and fungal activity. Meat baits as used in Tasmania are about 120g of fresh kangaroo meat, each dosed with 3mg of 1080 dried hard to about 40g for storage then use (eg Saunders et al 1995). By the time they are set (buried) some 1080 is already broken down and on average they then only contain 2.7mg - a 10% loss. Once buried, degradation of 1080 accelerates, the rate depending on soil conditions (particularly moisture and temperature) and consequent baits degradation. Such degradation of 1080 is well known (eg Saunders et al 2000).

Tasmanian 1080 fox dried meat baits have been tested after different times in the ground in field conditions and on average after 2 days in the ground only 43.3% of 1080 remained, after 5 days there was 28.2% left, after 10 days 19.7% and after 15 days 11.6%. However, there was considerable variation even between neighbouring baits; some in wet places have much less 1080 residue and some in dry places much more than the average.

Number of baits needed to put individuals at risk

Considering the sensitivity of spotted-tailed quolls, devils and foxes to 1080 and degradation of 1080 in buried baits we can calculate how many baits buried for various times need to be eaten by different sized spotted-tailed quolls, devils and foxes within 2 days to have a 50% chance of being killed.

We see below that a very small spotted-tailed quoll will consume an LD50 if it eats most of one freshly layed bait but that same animal would have to eat at least 5 baits within 2 days once they had been in the ground for two weeks to be at similar risk. Similarly a very large spotted-tailed quoll would have to eat more than 4 freshly layed baits to be at risk but more than 30 after two weeks in the ground.

Days in ground	Weight of Spotted-tailed Quoll (kg)					
	1	2	3	4	5	6
	BAITS FOR AN LD50					
0	0.7	1.4	2.1	2.7	3.4	4.1
2	1.4	2.8	4.3	5.7	7.1	8.5
5	2.2	4.4	6.5	8.7	10.9	13.1
10	3.1	6.2	9.3	12.3	15.4	18.5
15	5.3	10.6	15.9	21.1	26.4	31.7

We see below that even a very small devil (probably not even weaned) needs to eat more than 3 freshly layed baits within 2 days to reach an LD50 and large devils need to eat very many baits in a short period to reach an LD50.

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Days in ground	Weight of Tasmanian Devils (kg)					
	2	4	6	8	10	12
	BAITS FOR AN LD50					
0	3.1	6.3	9.4	12.6	15.7	18.8
2	6.5	13.0	19.6	26.1	32.6	39.1
5	10.0	20.0	29.9	39.9	49.9	59.9
10	14.1	28.3	42.4	56.5	70.6	84.8
15	24.2	48.5	72.7	96.9	121.1	145.4

We see that foxes are extremely susceptible to 1080 baiting and in many circumstances need less than 1 bait to reach an LD50.

Days in ground	Weight of Red Fox (kg)				
	2	3	4	5	6
	BAITS FOR AN LD50				
0	0.1	0.2	0.2	0.3	0.3
1	0.2	0.3	0.4	0.5	0.6
5	0.3	0.5	0.7	0.8	1.0
10	0.5	0.7	0.9	1.2	1.4
15	0.8	1.2	1.6	2.0	2.4

The chances of individuals finding enough baits in a short enough period to be at risk

Extensive testing with foxes on mainland Australia clearly shows they can find baits immediately they are buried; initial take is often high and usually continues until baits and/or foxes are greatly reduced (eg Saunders et al 1995). Limited testing with Foxoff and fresh meat baits with captive and wild spotted-tailed quolls in NSW showed they could detect buried baits but trials only identified this species as taking 2 of 7 baits taken after 3-4 weeks buried adjacent to a spotted-tailed latrine in the wild (Belcher 1998); results consistent with Tasmanian observations considering time buried and that baits were replaced exactly where taken (see below).

Research on take of fox baits without 1080 was undertaken with an isolated, island population of devils (no quolls or foxes present). Initial take was very low (a few % per night) but escalated once baits began to rot, to the point where most baits were taken after 3 weeks. These results were mirrored in places with devils and spotted-tailed quolls, devils and eastern quolls and eastern quolls alone; there are no places exclusively with spotted-tailed quolls in Tasmania. If baits were replaced in a hole where a previous bait had rotted then re-take could be immediate but if placed in a new hole take was very low. Devils in particular would sometimes deeply excavate holes in which baits had rotted.

It seems devils and quolls are not well equipped to find buried baits until they rot or are otherwise smelly (or replaced); probably there has been no need in their evolution. On the other hand, foxes and dogs evolved under conditions of extremely harsh winters where caching and recovering food (or raiding others' caches) was fundamental to survival. Therefore, these canids are 'professionals' at finding buried food (eg Saunders et al 1995, Twigg et al 2000). This does not mean that other species cannot find any buried baits or might even be exposed accidentally (eg during echidna excavations) but it is a clear trend.

There has been considerable questioning of what animals have taken the thousands of baits of the nearly 80,000 so far set in Tasmania. Checking baits daily allows a reasonable judgment of what might have taken them and in the early days of baiting (2002/3) when daily checks were undertaken about 20 baits were recorded as taken in typical fox style (as seen else where in Australia). Once baiting expanded and baits were only checked at recovery such judgments of take could rarely be made; hence the experiments reported here. If baits were recovered 2-3 weeks after burial few were missing but if it was 3 weeks or more most might be - it seemed a simple fact of rotting and then being found.

In operational fox baiting in Tasmania, baits are buried at a landscape density of 5-10/km². The number of baits in an animal's home range can also be considered and how much competition there might be for baits. A large devil might have 100 baits in its home range but that home range would likely be shared by 10-30 other devils plus quolls (and possibly foxes). Thus, the baits available per individual are comparatively few.

The chances of individuals eating enough baits in a short enough period to be at

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risk

Although they can easily eat soft baits, tests have shown that small or even medium sized spotted-tailed quolls and very small devils do not (probably can not) eat very dry and hard baits and it is not until they are independent that they are likely to be under enough nutritional pressure and are strong enough to eat such. Tests on captive mainland Australian spotted-tailed quolls support these results (Belcher 2000).

What actually happens in the field?

Considerable research has been done on effects of 1080 fox baiting on spotted-tailed quolls on mainland Australia (eg Kortner ET al 2003). In Tasmania, experimental 1080 baiting was not carried out but rather, research waited until an operational baiting occurred in an area with enough spotted-tailed quolls to usefully study (near Wynyard).

Although there were too few quolls in the study sites area (and a comparative control site with no baiting) to have statistically robust comparisons of numbers before and after baiting we found individual spotted-tailed quolls similarly persisted in both areas through and after baiting. Importantly, there were breeding females (with pouch young) and free ranging juveniles present in both sites after baiting; there was no identifiable difference between baited and non-baited sites. This work will be repeated as opportunity presents.

In the northern midlands where the effects of 1080 fox baiting on devils was being studied, there was also a 'background' population of spotted-tailed quolls. Trapping after a prolonged baiting period showed all elements of a normal devil population in place - breeders and juveniles with no apparent drop in density. Perhaps most interestingly, in the months after this research a substantial drop in numbers of devils due to Devil Facial Tumour Disease occurred and in another 6 months numbers of spotted-tailed quoll seemed to have measurably increased (probably due to decreased competition and predation from the fewer devils) and has stayed high with an apparently normal mix of breeders and juveniles. DFTD it seems has absolutely overwhelming effects (even if indirect) compared to fox baiting.

In an area in which Foxoff meat compound baits were operationally used extensive capture-mark-recapture studies were done of large local populations of Tasmanian bettongs *Bettongia giamardi* and brushtail possums *Trichosaurus vulpecula*, two species likely to eat these baits. Very few Foxoff baits were taken and there was no difference in population change between the baited site and a control site.

These Tasmanian 'pilot' studies suggest there is little if any damage to local populations of spotted-tailed quoll, Tasmanian devils, Tasmanian bettongs or brushtail possum from 1080 fox baiting in Tasmania as is known to have severe effects on fox populations on mainland Australia (eg Saunders et al 1995).

State-wide Effects

A final check can be made by looking at what proportion of Tasmania's spotted-tailed quoll and devil population might be exposed to 1080 fox baiting. So far, 1080 fox baiting has only touched the fringe of Tasmania's core spotted-tailed quoll habitat and perhaps less than 2-3% of Tasmania's spotted-tailed quolls have been in baited areas. Similarly perhaps 5% of Tasmania's devils have been in baited areas. These areas and percentages may increase by half with planned fox baiting but, even then the reality is little or no effect on a small proportion of the State's populations of these important species.

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Nick Mooney is a wildlife biologist with DPIW and has been working with Tasmanian wildlife for more than 30 years. Amongst other hats, he pioneered Tasmanian rehabilitation and conservation of raptors including eagles in forestry, has monitored reports of Thylacines and foxes, helped with responses to newly discovered diseases, whale strandings and oil spills and developed practical conservation of devils and innovative wildlife tourism. Most recently he kicked off the response to Devil facial Tumour Disease and has been giving advice for the response to recent evidence of foxes in Tasmania. Nick is assessing the potential ecological effects of DFTD, foxes and cats; he sees the biggest ecological threat as establishment of foxes because of DFTD, a process that could cause the ultimate long term threat to devils (his favourite animal).

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DI

Coordinated large-scale baiting - a key part of the Tasmanian fox eradication program

This brochure is aimed at landholders. It provides information on the background to the Tasmanian fox eradication program, the importance of baiting in eradicating foxes and how landholders can help improve the effectiveness of baiting as part of the Fox Eradication Program (formerly known as the Fox Free Taskforce).

What is the problem?

There is clear evidence (footprints, faeces, carcasses and DNA) that foxes are present in Tasmania. This evidence is supported by a large number of credible fox sighting reports from across the state. Without cooperative effort to kill these foxes and prevent breeding, they are likely to increase in numbers to an extent that eradication will no longer be possible. An established population of foxes in Tasmania will have major impacts on the farming industry and the local economy in general. The negative impacts on biodiversity and associated ecotourism will be dramatic.

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fox eradication program



P.D. Meek

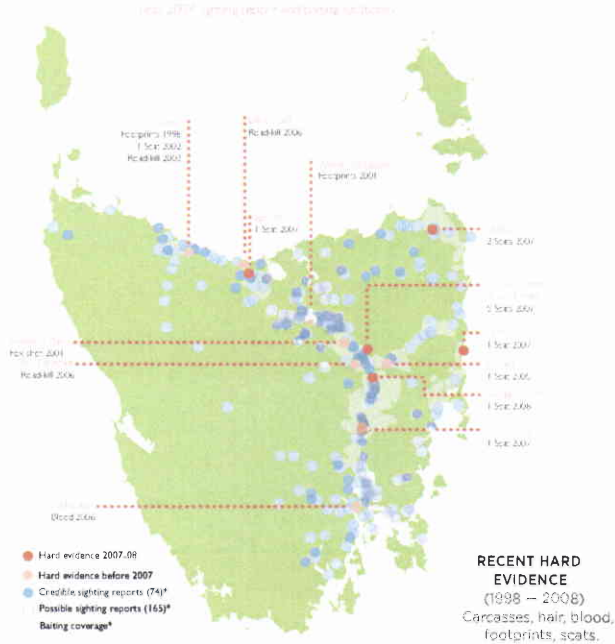


D2

An established fox population in Tasmania would have major impacts on wildlife, associated tourism and the sheep industry.

Figure A

Hard Evidence of Fox Activity in Tasmania



There is considerable 'hard' evidence (Figure A) that foxes are present in Tasmania, including: roadkills (Figure B); confirmed fox footprints (Figure C); and, faeces confirmed to be from foxes through DNA analysis (Figure D).

Figure B



Figure C



THE "ALPINE" LONG
HAIR D SILVER FOX
RECOVERED AT GLEN ESK ROAD
CONARA 1/8/2006

Figure D



Why use 1080 baiting?

1080 (sodium fluoroacetate) is a naturally occurring compound which foxes are extremely sensitive to. The small dose rate (3 milligrams per fox bait) combined with bait material (dried meat) ensures that there is minimal risk to native species.

Whilst 1080 use to reduce browsing damage (by rabbits, possums and wallabies) is being phased out in Tasmania, it is likely to be maintained for the fox eradication program unless a satisfactory alternative becomes available. A new toxin, 'PAPP' (para-amino propiophenone), has been identified and is currently being tested.

Long-term experience from mainland Australia has proven that 1080 baiting is by far the most effective way to control foxes over large areas. It is not feasible to physically locate and remove all foxes through labour-intensive techniques such as shooting and trapping.

1080 baiting is the most cost-effective method to control foxes over large areas.



Tasmanian Fox Eradication Program baiting strategy

A broadscale baiting campaign is now being conducted in Tasmania on private and public lands in the areas where foxes are either most likely to be present or where recent evidence has confirmed their presence.

It is important to note that the baiting program used for foxes has been specifically designed for Tasmanian conditions and to make the program as target specific for foxes as possible. This is based on:

- the much greater tolerance of native carnivores to 1080 compared to foxes;
- the ability of foxes to find buried baits more readily than native species can;
- using baits that are not as attractive to local native species until they start to rot, by which time most of the 1080 has broken down; and
- retrieving any baits not taken after 28 days and disposing of them under strict controls.

Monitoring trials have confirmed that baiting programs are not adversely impacting on local native species populations.



Taking part

Landowners in areas to be baited will be contacted by Fox Eradication Program Field Officers seeking access for baiting. When Program field officers lay baits, flagging tape marks each bait and the position is recorded on a GPS. The baits are spaced approximately 200 metres apart. The field officers are also careful to stay away from roads and other boundaries, permanent water and houses.

Letters known as 'Neighbour Notifications' are sent to all properties around the area being baited, to ensure that people in the vicinity can take due precautions during the period of baiting. Contact details for the Program are included so that any questions neighbours may have can be personally answered.

For specific enquires about the Tasmania 1080 fox baiting program contact the 1080 baiting hotline: 1300 76 1080.

RED FOX



ACTA

ACTA

What are the challenges faced by the 1080 baiting program?

The large area that needs to be baited

Based on the combination of suitable fox habitat and locations where evidence of fox presence has been gathered, it is estimated that the area that needs to be baited is approximately 10% of Tasmania. This area may increase if further evidence of foxes shows up in other regions.

The baited zones will be guided by evidence of fox presence and areas of high habitat suitability for foxes.

The need to bait more than once per year

Ideally, baiting in priority areas would be conducted more than once per year to maximise the chances of foxes locating a bait and to target key periods in the fox life cycle:

- before mating in winter, when fox populations are at their lowest;
- before and after whelping in spring when the food requirements of female foxes is high; and
- in autumn when juvenile foxes are dispersing and therefore more likely to encounter baits.

Fox mobility

Foxes are a highly mobile animal and may range across a number of properties. It is therefore essential to be able to bait large areas at the same time and this requires cooperation between landholders. The ability to coordinate baiting across regions can be compromised by lack of access to individual properties.

Limited resources to meet the required baiting intensity

Whilst the resources of the Fox Eradication Program are being increased to match the effort required to prevent foxes from establishing in Tasmania, it will still be a challenge to cover the planned baiting area more than once per year.

Farm dogs and other 'non-target' animals

Dogs are susceptible to 1080 poisoning. However, this risk can be easily managed, as per current Fox Eradication Program guidelines:

- Program officers will ensure neighbours are contacted and signage is placed to notify people in the area that a baiting campaign is being conducted (this process is more efficient where coordinated baiting is able to be conducted across many properties at the same time).
- Program officers place baits according to specific instructions, including distance restrictions, correct burial and recording of bait locations (the website listed below provides more detail about the baiting program).
- Landholders should ensure that dogs never have access to baits during the baiting operation and are not allowed into areas with active baits unless muzzled.



How you can help

- If your property is in a priority area, providing access to the fox eradication program for fox monitoring and baiting activities is appreciated and essential for the success of the program.

Landholders can also help by looking for signs of fox activity such as footprints and faeces, and animal remains (Figure E) around breeding dens (Figure F) and other harbour such as log piles (Figure G).

Further information:

General Enquiries,
Fox Eradication Program
Phone: (03) 6336 5320

Sightings Hotline 1300 369 688

Internet: www.dpiw.tas.gov.au/fox

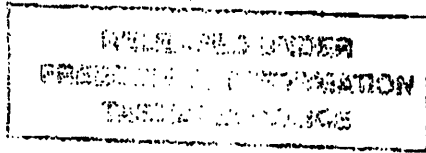


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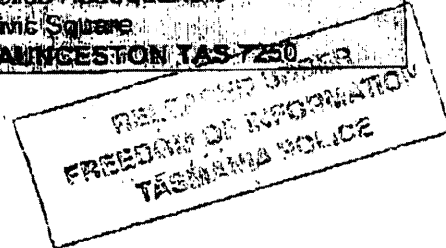
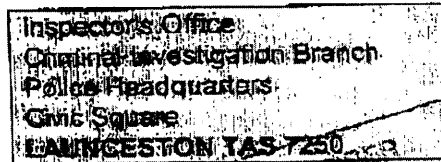
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OS-K 653



TASMANIA POLICE

Our Ref: MLO:PMB
Enq: 63 363912



13 July 2001

Commander I DEAN
Northern District
Launceston

**ALLEGED CONSPIRACY TO IMPORT FOXES INTO TASMANIA
AS PER CONFIDENTIAL BRIEFING NOTES**

As you are aware, the Task Force was established on 20 June 2001, to operate covertly in an endeavour to establish and verify the contents of the Briefing Note and determine the validity of the information.

Naturally, the "source" of the information required evaluating to determine its veracity.

Initially, there was considerable resistance to disclosure of the informant and eventually on 25 June 2001, the Task Force was advised that an [REDACTED]

On 26 June 2001, Task Force members interviewed the original 'source' at the Oatlands Police Station and a statement obtained.

On 03 July 2001, [REDACTED] was further interviewed by Task Force members concerning his written statement, the Briefing Notes and dot points, allegedly made by [REDACTED]

Confirmation of the written statement to Police on 26 June 2001, [REDACTED] was gained with a complete denial or knowledge of other information contained either in the Briefing Notes or dot points.

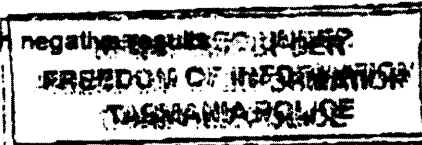
In essence the 'source states' :

After the Carlton/Collingwood game, he was at Allgoods, Main Road, Glenorchy, when an unknown male person stated during a conversation that foxes had been brought into the State by Samba shooters. Two lots of cubs; five (5) in one lot, six (6) in the other, transferred to Tasmania on the T T Line in a vehicle and had been reared in the bush. The Samba shooters from Perth, no names given.

INVESTIGATION

The variance given between the Briefing Notes and [REDACTED] is significant. Notwithstanding this, the Task Force has interviewed [REDACTED] with negative results.

- Search conducted of the property [REDACTED] with negative results.
- Samba hunters within the Perth area



[REDACTED] regular and professional shooter for the Forestry Department - negative.

[REDACTED] well known shooting/hunting family: no knowledge

Numerous landowners, farm employees have no knowledge

With reference to the above group, each person understood the implications as the introduction of foxes upon the Tasmanian environment and its detrimental affect and in turn, would assist Government authorities.

- A [REDACTED] is alleged to have brought a fox pup into Tasmania and interviewed on 04 July 2001 - negative.
- [REDACTED] discovered a possible den after sighting a fox on his property
- Den excavated with Mr Peter MOONEY, National Park co-ordinator, designated to search and locate sightings of foxes - negative.
- With reference to exhibits obtained, there is no evidence to support the existence of a fox.

SUMMARY

The enquiries conducted by the Task Force has concluded that :

- The original source of information cannot be corroborated by any material of fact or evidence
- The Briefing notes cannot be corroborated, other than the existence of the persons mentioned and no corroborative evidence to suggest any involvement in fox conspiracy.
- There is no evidence available from the enquiry that there is an illegal importation of foxes by Samba shooters in the Perth area
- There is no evidence available from the enquiry that there has been illegal importation of foxes by any known group of civilians

- That all civilian sightings in the Hadspen /Carrick region are not corroborated by any scientific evidence and can be explained
- That Mr Peter MOONEY, the search team co-ordinator for the National Parks, has not established that foxes are in Tasmania and nor is there one single piece of evidence to corroborate that assertion

Forwarded for information.

[Handwritten signature]
M L OTLEY
Detective Inspector

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TASMANIA POLICE

ATTENTION

[REDACTED]

"B"

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[REDACTED]



NORTHERN DISTRICT COMMANDER

Enquiries: IND/EP

3897
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TASMANIA POLICE

17 July 2001

Commissioner of Police
 CORR No. A-3752/01
 FILE No. Sinda 24/85
 20 JUL 2001
 ACTION DcoP

Our Ref:
Your Ref:

Deputy Commissioner J JOHNSTON
HOBART

[Handwritten notes: R. J. ...]

ALLEGED CONSPIRACY TO IMPORT FOXES INTO TASMANIA

The file involving the fox investigation, Northern District is forwarded for your attention.

The attached report (copy) submitted by Inspector Otley and dated 13 July 2001 was forwarded by facsimile for the information of the COP on Friday 13 Jul 2001 following a request from the Commissioner.

Co-Operation - National Parks & Wildlife Services

I have shown concern at this enquiry from its commencement. As you would be aware initially the cooperation of DPIWE (Parks & Wildlife Service P&WS) left a lot to be desired and it wasn't until I understand, a direction was given at executive level in DPIWE that this changed.

Original Information

The original 'brief' provided us, contained information which on the face of it supported that there was a real likelihood of foxes having been brought into the state. However, on investigation it became abundantly clear that the original informant (spoken to by police) had only passed on part of that information, most of which was hearsay and gossip. The remaining information seems to have come from P&WS personnel who have relied on rumour and probably 'guesswork'

*!

None of the information was confirmed and some was found to be highly suspect.

Explanation for Information

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[REDACTED]

[REDACTED]

Responsible Person

Police also had problems in the initial stages in identifying a responsible person within P&WS to work with and to take ownership for that Department. The individual members, generally worked well with police.

Exhibit Analysis

There was a clear lack of support from P&WS with regards the analysis process of exhibits taken possession of which were likely to have confirmed the existence of a fox (foxes) in the state. We were continually given explanations (run around) to cover for the slowness of the analysis. It is not said that it was deliberate but it did identify with poor practices.

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Covert Enquiry

The enquiry done by police here has been covert. I think the lack of publicity on our involvement and particularly with the type of information we were working with demonstrates the success of that approach. The members involved in the investigation are to be commended for their technique and adroitness as it has prevented an escalation of publicity as would no doubt have occurred. This is not to say that the detail giving cause for our involvement will not be mischievously released in the future, as many people are now aware of police involvement .

Evidence

The police enquiry has not uncovered any 'real' evidence whatsoever that would tend to confirm the existence of a fox (s) in Tasmania

The analysis done on exhibits have proved negative and many of the 'so called' sightings have been suspect. I reiterate the original information provided to police is unconvincing and was proved to be wrong in some instances and with the informant denying having provided some detail.

St Helens

The information as recently provided from St Helens did not fall within the scope of this enquiry and therefore has not been enquired into.

It does seem however, that the information on that shooting is spurious.

Conclusion

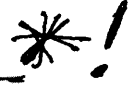
I think Detective Sergeant Coad sums up the situation reasonably well when he says:-



I think it is fair to say that had police received a similar quality of information on a crime, the chances are that the rating given it would have been at the lowest end of the scale.

A further part of this file has been retained within the CIB office.

In the absence of a further direction/request the investigation is now concluded




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I N DEAN
Commander

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TASMANIA POLICE

NOTED

DEPUTY COMMISSIONER
31/7/2001



TASMANIA POLICE

Our Ref: MO:PMB
Enq: ☎ 63 363912

Inspector's Office
Criminal Investigation Branch
Police Headquarters
Civic Square
LAUNCESTON TAS 7250

29 August 2001

Commander I DEAN
Northern District
LAUNCESTON

**ALLEGED CONSPIRACY TO IMPORT FOXES INTO TASMANIA
AS PER CONFIDENTIAL BRIEFING NOTES**

As you are aware, on 30 July 2001, I submitted a comprehensive report concerning Tasmania Police activities into briefing notes from the Minister of Police, David LLEWELLYN MHA.

There have been a number of articles in the Mercury Newspaper dated 21, 22 and 23 August 2001, concerning proof of existence of a fox in Tasmania. I have conferred with Peter MOONEY, Task Force Commander, concerning Parks and Wildlife Service investigations. Mr MOONEY has indicated that a set of prints from a fox were located at a property at Woodlands, which led to nowhere, and that his service was continuing investigations in an endeavour to locate the existence of a possible known fox in the Longford area.

Mr MOONEY indicated that his enquiries had no relevance on our initial directive concerning the conspiracy theory.

Mr MOONEY did not require this Service's resources at present and would contact myself as previously agreed, if the resources of this agency were needed.

Forwarded for information.

M L Otley
M L OTLEY
DET INSPECTOR

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Criminal Investigation Branch
TASMANIA POLICE

TASMANIA

POLICE

FILE NUMBER Tasmania Police FOI File Disclosure
N
L /

District	Division	Station	Date
N	Launceston	CIB	13 July 2001

To
 Det Inspector M L OTLEY
 Criminal Investigation Branch
 LAUNCESTON

ENQUIRY ON INFORMATION PERTAINING TO AN INDIVIDUAL OR CONSPIRACY BY INDIVIDUALS TO TAKE PART IN THE ILLEGAL OPERATION OF IMPORTING FOXES INTO TASMANIA FROM MAINLAND AUSTRALIA AND BEING CAGED, REARED AND RELEASED INTO THE WILD

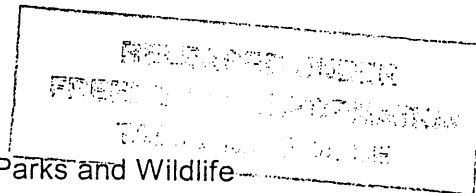
I report that enquiries were carried out into the above mentioned matter with the understanding and knowledge that the effect of the fox in this State would be absolutely devastating to native wild life and vegetation, along with the farming community.

Also, the agenda of this Task Force was to specifically concentrate on the illegal operations of importation of the fox or a co-conspiracy to import foxes for rearing and release, rather than the follow up of the many reported sightings of this fox. Some of these sightings were visited in the chance that they form part of the investigation of our agenda.

The initial enquiry as far as we were concerned commenced and took the following course.

On the morning of the 20 June 2001 at 9am, a Task Force under your hand was commenced. This Task Force was set up under your command, consisting of:

- Det Sergeant R C COAD No 436
- Det Constable T C ALLEN 560
- Det Constable N W McLARTY No 743
- Det Constable R L BAKER 1889
- Mr Glen ATKINSON, Department of National Parks and Wildlife



At 9.30am, a full briefing was held, the initial confidential briefing note was tabled and discussed.

The briefing note was:

BRIEFING NOTES: ILLEGAL IMPORTATION OF FOX'S INTO TASMANIA

INITIAL INFORMATION

Information started to filter in initially from various shooting groups throughout the State, starting approximately two weeks ago. The information related to [redacted] who go to Victoria every year shooting [redacted] bring fox pups into the State and releasing them.

INVESTIGATION

From the initial report, numerous people within the shooting fraternity were contacted by several rangers involved in the fox investigation to find out more details and to determine the reliability of the information.

SUBJECT REPORT - Continued

The reports that were received seemed to be very reliable and indicated that three (3) people were involved in the importing, raising and release of eleven (11) fox cubs into Tasmania.

At this point in time, we were unaware as to how many were involved in the capture from Victoria of these fox pups. It is alleged that these pups were brought into the State over the Launceston Show week of 1999 via the boot of a vehicle travelling on the Spirit of Tasmania. The pups were allegedly raised on a property in Longford area in a pen in the bush, until they were adult size (approx 2 months).

by letter 1999

(with 2 km S Longford St Helens)

These pups were then allegedly split up and released into the wild, but we are unaware as to the location of these release sites. Allegedly, the same people involved in this release attempted a similar operation previously in 1977, in which eight (8) pups were allegedly imported and released. This belief was that this attempt had failed and resulting in a second attempt in 1999 to establish a population of foxes in Tasmania to improve the hunting.

0 years earlier

SUMMARY

Two of the suspects allegedly involved in this operation are located in areas where we have had very positive fox sightings. These include Longford and St Helens. The information received so far indicates that a third person involved comes from Oatlands, which also corresponds with a number of recent fox sightings in that area,

The two people allegedly involved in the import and release of these fox pups are:

[Redacted names and addresses]

Two Names and Addresses given

NOTE 1

Information received indicates that [Redacted] may no longer be at the above address, but is still living in the St Helens area.

[Redacted text]

NOTE 2

The main informant is extremely concerned about threats that have been made about releasing information to authorities. His concerns relate directly to the possible action from [Redacted] who has a history of violence. As a result, this informant refuses to co-operate in any other way other than that which is currently in place. - 7 Statement

On perusing the initial briefing note and the contents of same, one can appreciate the delicate nature and urgency of an enquiry. An initial priority had to be the identity and the gaining of all information and knowledge and analysing of all information.

It was noted that the briefing notes specifically mentioned two (2) persons,

[Redacted names]

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FOI ACT 1992
23/08/2000

SUBJECT REPORT - Continued

These two mentioned persons, along with the mentioned addresses, seems to run with a number of recorded recent sightings in the area of Carrick / Hadspen / Longford and at St Helens.

An initial duty was to obtain maps of areas concerned and a summary of those sightings. At this stage, enquiries were commenced to obtain profile on [redacted]

Enquiries were carried out on [redacted] who rightfully or mistakenly believes he sighted a fox. *(Is this Chris Spencer?)*

Enquiries were carried out at [redacted] which initially were negative, as were enquiries at [redacted]

On the morning of 25 June 2001, it was identified that [redacted] *(original informant or 'source')* supplied information to spark this enquiry. Mr Glen ATKINSON was tasked through his department to organise a meeting between Task Force* members and [redacted] *Police*. A meeting and briefing took place to discuss the actual contents and importance, validity of the information.

It came to notice that [redacted] actually obtained his information from [redacted]. Arrangements were made for [redacted] to meet Task Force members.

On 26 June 2001, Detectives spoke to the two informants at the Oatlands Police Station and a statement was obtained from [redacted] in reference to the original information. *Police (McLarty + Co)*

[redacted] stated that around the period of 7 May 2001, he was leaving Allgoods Store, Main Road, Glenorchy, when he had a conversation with a male person who was paying attention to his dog, (which was in the rear of his vehicle, because of the unusual colouring). [redacted] vehicle had gun stickers on it and a conversation ensued about being deer shooters and localities. This person in a conversation that was very brief, mentioned that foxes had been brought into Tasmania via TT Line. He stated that there were two (2) lots, five (5) pups in one lot, six (6) in another and were being reared in bush somewhere. This person did say that [redacted] were responsible.

[redacted] says he treated it then as a bit of a joke, but on thinking about it, being a responsible shooter and the devastation that could be caused, he thought about the possibilities and spoke to [redacted] the National Parks and Wildlife.

This was all the information given. From that and through conversation somehow, the confidential briefing was submitted and I will return later to that briefing note and make some relevant mentions of the same.

Enquiries continued, which led to information coming from [redacted]. Task Force members travelled to New Norfolk and obtained a statement from [redacted]

SUBJECT REPORT - Continued

Tasmania Police
FOI File Disclosure

In this statement, he talks of knowing and the activities of [redacted] had been in Victoria and on returning, had brought a fox pup into Tasmania.

Enquiries continued with the thought that [redacted] may have moved to the Carrick area, which once again, if that was the case, may have supported sightings in the Carrick / Hadspen / Illawarra Road areas.

Enquiries were made to gather further information on [redacted]

At this point in time and because of sightings in the Carrick and Hadspen areas and conversations with [redacted] and [redacted] who are both convinced, again rightly or wrongfully, that they saw a fox and subsequently a possible 'den' on [redacted] property, being located, a conservative effort was made to confirm or eliminate the prospect of a fox.

On 4/7/2001, for confirmation or elimination under guidance of a [redacted] who was the person in charge of the fox sightings and identification, but separate to our agenda, the suspect den was examined prior to and during excavations, and at the conclusion, was negative.

? Peter Mooney

On 2/7/2001, a full briefing was held and a particular discussion of conversation was once again the original information and validity of that information.

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ACT 1992

The original briefing note and is the crux of this enquiry and the Task Force agenda. With this in mind and in possession of briefing notes, Task Force personnel travelled to [redacted]

[redacted] was more than happy to take the time from his work site to meet and discuss this issue with us. The original statement he made was discussed, along with some briefing notes and details of the Confidential Note.

[redacted] expressed amazement as to how much information, details, names and locations could be logged through him. He was unequivocal in that the contents of his statement was as much as he ever said.

He stated again that the person he spoke to mentioned, [redacted] (Name?) TT Line, Perth area, and that was it. There were no names, there were no locations as 'Longford' areas and there were property names. He has no knowledge whatsoever of the property [redacted] or persons particularly mentioned, [redacted]

As to the explanation on the Minister's Briefing Note, I will say this.

On 26 June 2001, when Task Force members met [redacted] and [redacted] at the Oatlands Police Station, it was mentioned by [redacted] in conversation that he was aware of [redacted] in the Perth area and actually mentioned the names of [redacted]

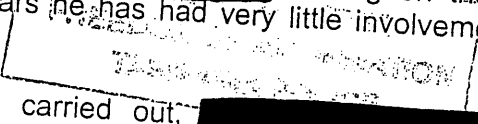
[redacted] supplied information for the original briefing note through his brother [redacted]

[REDACTED]

Enquiries continued with focus on mentioned targets, namely [REDACTED] through this enquiry. All three were located and spoken to, all three were up front, forthright responsible people, who were amazed at what our approach was and the context of our enquiry.

Because of the nature of the enquiry and the idea of carrying it out as quietly as possible to avoid any possibility of public or media outcry, the approach was made as diplomatically as possible, as there were no direct allegations to be made.

[REDACTED] was spoken to at length. He had no knowledge of the illegal importation of foxes whatsoever. He is employed on the farm [REDACTED]. He has no understanding of why anyone would want to be involved in this process activity. In years gone by he was a shooter and was involved in [REDACTED] hunting on the Mainland. He was extremely co-operative. Of recent years he has had very little involvement with the sport or other shooters.



On 11 July 2001, due to enquiries carried out, [REDACTED] came to Police Headquarters, Launceston, and spoke to Task Force members. He was extremely co-operative and stated he was a hunter and does pursue [REDACTED] in Victoria. He expressed concern for the devastation would cause in this State if they were imported and released. He had no knowledge or information that would assist this enquiry.

[REDACTED] was spoken to in reference to information uncovered in this enquiry relevant to himself. On 10/7/01, he made a statement to Task Force members, where he stated that in 1984, he was on the Mainland and found a fox cub and kept it. He said it escaped the Werribee area a couple of days later. He openly states that at the time he was going to bring the cub to Tasmania. This statement supports to a degree information forthcoming from [REDACTED] as mentioned earlier.

During our enquiry, another person spoken to was a regular [REDACTED] hunter and professional shooter for the Forestry Department, was [REDACTED]. This person regularly hunts and has vast knowledge of foxes and the devastation that would be caused. He has a regular contact with large numbers of hunting groups and has had heard nothing direct or rumours that would assist or would throw any light on this matter.

Enquiries also led us to make enquiries and speak to [REDACTED] [REDACTED] is one of a well known shooting / hunting family and is known to be involved in [REDACTED] shooting in Victoria. This enquiry led to no further information on this matter.

All persons spoken to express their concerns about the presence of the fox. All have stated they themselves will talk and listen and pass on any relevant information to the authorities.

Through the mentioned locations of Perth / Longford / Carrick / Hadspen, many landowners, farm owners, have been spoken to, and nobody can assist any further.

SUBJECT REPORT - Continued

In this enquiry with our agenda in mind, I make these summations and also take into account the other role of wildlife personnel on alleged sightings etc, that there is no solid physical, forensic / scientific evidence to support any findings of illegal importations of fox or presence of fox in Tasmania.

With our Agenda in mind, I cannot explain the full contents and information that came to be in the Minister's Briefing note. I can say that our investigation was a totally negative finding.

[REDACTED]

[REDACTED]

I feel that all persons spoken to co-operated fully, with total understanding and will continue to co-operate.

Forwarded for your information, perusal and any action you deem necessary.


R C COAD
DET SERGEANT 436

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Tasmania Police
FOI File Disclosure

✓
A-3118/03 (C4/85)

DRP:KT

20 June 2003

[REDACTED]

Dear [REDACTED]

Thank you for your letter dated 13 June 2003, in relation to fox investigations and related matters. Dealing with the specific questions that you posed, I can advise as follows:

- Tasmania Police has not conducted investigations or received any further information concerning the introduction of foxes into this State, since 2002. As you are aware, there has been a special Fox Task Force established within the National Parks and Wildlife Department. Any information received by Tasmania Police, either through Crime Stoppers or elsewhere, is passed onto the Task Force. Tasmania Police members are available to, and do assist, the Task Force as and when required.
- There have been no further conclusions reached since the original reports.
- No persons have been confirmed as introducing foxes into this State.
- Tasmania Police has received information that a number of persons have been responsible for the introduction of foxes into the State. Investigations to date have failed to provide any evidence to prove this.
- There is no evidence currently in possession of Tasmania Police to prove that any particular person has introduced foxes into this State.
- At this stage Tasmania Police does not have sufficient evidence to prosecute any person with the importation of foxes into this State regardless of Statue of Limitations.

- As you would be aware, as of 1 January 2003, the Statue of Limitations covering this particular matter have been increased from six months to five years.
- Tasmania Police will investigate additional information relating to the introduction of foxes into this State as it comes to hand.

I trust this information has sufficiently covered the questions posed.

Yours sincerely



L R PRINS
Assistant Commissioner of Police
Crime and Operations

E1

D. LLEWELLYN
HANSAARD LEG. COUNCIL ESTIMATES Committee
TUESDAY 4th June 2002

CHAIR - One of the first questions I suppose I could ask - with the Consolidated Fund appropriation there has been \$1.4 million I think in relation to fox eradication, which seems to be newsworthy at the moment. Has there been any evidence or 100 per cent evidence to show that a fox or foxes are here in Tasmania? You speak with some farmers, they say, 'Look, I would have seen one if they were here, because I'm out in the paddocks and hills. Time and time again, I've never seen one'. Then you get a report in the paper where somebody saw one. I just wondered what evidence there is to say there are foxes or there is a fox.

Mr LLEWELLYN - You will need to bear with me a little and I will give you a bit of the historical aspect of it as well.

You would recall that about 18 months ago we first had the allegation that there had been several litters of foxes brought into the State. We got the police and the department on to that particular job and they analysed that and worked for some time in trying to assess whether or not they could get to the bottom of the issue. In the end there were a lot of people interviewed but no conclusive allegations materialised to the stage of charging people.

"NO CONCLUSION" MR LLEWELLYN?
WHAT ABOUT YOUR OWN POLICE DEPARTMENT
LETTERS OF THE 13th & 17th JULY 2001

As time went on there was a series of reports of people sighting foxes and in the original allegations it was alleged that litters were distributed in and around Longford, in and around the south of Oatlands and on the east coast near St Helens. When over time this constant spread of information about sighting the foxes came in and when it was all coordinated and so on it corroborated those original allegations because all the sightings were occurring in these areas where it was alleged that the fox litters had been distributed. Longford, south of Oatlands, Campania and in that region and near St Helens.

Ultimately there were two foxes shot - one which you cannot draw any conclusion about because the people who shot the fox although they had a photograph in the newspaper -

Mr FLETCHER - That was the one near St Helens, wasn't it?

Mr LLEWELLYN - No, this was the one near Longford. They eventually sent the pelt of the fox to the Parks and Wildlife Service and that was a recently-skinned fox skin. There were DNA tests done on it and so on and it matched in respect to this source of origin again the alleged stories that were there.

Subsequently a further fox was shot near Symmons Plains and that was recovered, analysed and the stomach contents and so on analysed and found to be containing small animal species and so on that were only here in Tasmania. So fairly conclusively it was shot where it was shot and so I think one can conclude that that was perhaps the most significant event that proves that foxes are in the State.

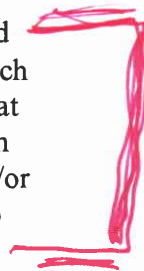
On top of that the DNA assessments that were made put the second fox as being a sibling or a close relative of the first fox and having originated in southern Victoria from the area where these foxes were alleged to have come. So all of the circumstantial evidence and this latest hard evidence adds up to the fact that this is the case.

On top of that we get maybe six or eight reports a week of fox sightings on the fox hotline, 80 per cent of which we believe to be legitimate sightings particularly when we know they come from people who have been fishing and foxes have come down within a few metres of these people and investigated what was going on and then disappeared and so on. I have noticed in the newspapers some people are very dubious about this but certainly I am not and I do not believe that we can afford to take risks so there could be a number of foxes - between maybe 11 and 20 that are in the State at the moment. So that is why we have to have this coordinated program. We work with the CRC for pest management in Canberra. There has been a lot of preliminary work in getting the appropriate people together to deal with the issue of how we actually manage this very low number of foxes. They are very cagey, shy animals and it is no wonder people do not see them readily because they have learnt to avoid people.

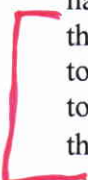
CHAIR - Are you aware if 1080 is going to be laid in the near future?

Mr LLEWELLYN - Yes, that is one of the programs that the Commonwealth are very anxious that we get on with and they have finally made a contribution to this program of \$400 000. We hope that that will be an ongoing contribution as well, but at the moment it is \$400 000 and that was made on the basis that they thought we should employ a 1080

baiting program, which has been successful in Western Australia and in other parts of Australia. The particular bait they are using on this occasion, again has been researched very thoroughly. There is a **Fox** Off bait which is a big pellet into the middle of which the 1080 poison is put in a hole and then there is a bait made of dried kangaroo meat that also has 1080 poison impregnated in it and we have done a fair bit of research with both of those baits by hanging them up at about a metre above the surface of the ground and/or burying them in the ground and seeing what reaction there is particularly with regard to our own species of quolls and Tasmanian devils and so on that may eat these baits.



The best situation that we can find that would both minimise the problem with our native species and at the same time capture a likely **fox** is to bury the kangaroo meat in the ground about 20 centimetres deep and this has been utilised in Western Australia and other areas as a means of actually getting these **foxes. Foxes** can apparently smell this bait from about 500 metres, so you deploy these baits at 500-metre intervals and we hope they will be a success. They will come along and dig them up and eat them and they only have to eat one of them and they will keel over, whereas with our own indigenous species they are not so susceptible to 1080. In regard to Tasmanian devils I think they will have to find 25 of them before they get a lethal dose and with regard to quolls I think they have to eat about four or five before they have a lethal dose. So we think it will both minimise the effect on wildlife, but also maximise our chances of getting **foxes**.



25
BAITS
MR
LLEWELLYN

CHAIR - Just a note, get **foxes** onto the output.

at 3MG
Per bait
= 75MG

Laughter.

DEVILS HAVE
A LETHAL DOSE
OF 4.24 MG

Mr RATTRAY - Minister, you stated earlier on that you had evidence that **foxes** are being imported into Tasmania.

PER KILO
OF BODYWEIGHT



Mr LLEWELLYN - Unsubstantiated.

Mr RATTRAY - I was wondering whether you made any charges because of the nature or what is likely to be. There is nothing that far out we could have supported something like that.

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EH

Mr LLEWELLYN - No, we are highly suspicious of how it happens and believe we probably know but, there is one thing to have an indication and high suspicion and there is the other of having the evidence to actually prove it and there is also the matter of the statutes of limitation with our current legislation. It may be that we might have to change that in the future because I think there is only a six-month statute of limitation on charging people in this area and we have issued a reward, as you know, of \$50 000 and so it is a substantial one for knowledge leading to the conviction of persons. We have had quite a big response from Crime Stoppers through that and all these reports have been investigated by the police. When we did have the police on the original issue that matter was given very serious consideration; there was an inspector and a number of police officers who worked hard at trying to find an outcome but were not able to.

Mr RATTRAY - Thank you.

[2.30 p.m.]