

REPORT ON FERAL PIG BAITING TRIAL, SERPENTINE PIPEHEAD
MARCH 1987

Background

In May 1986 the Health Department approved the use of 1080 for the control of feral pigs in water catchments, with baiting to be undertaken only by trained APB or CALM officers. In January 1987 the Water Authority of Western Australia requested APB assistance for a feral pig control trial in early 1987.

The Pipehead Catchment was chosen by the Water Authority for this trial because feral pigs here were considered to pose some risk to picnickers at Serpentine Dam, and because the area was relatively small with discrete boundaries. The trial provided the APB research section with an opportunity to test a reduced concentration of 1080 in pig baits. Murdoch University Veterinary School requested samples from any feral pigs recovered to test for the presence of hydatid cysts.

The proposed trial was approved as a "necessary operation" by the Directorate of CALM. APB research staff and wardens from the Water Authority inspected the Serpentine Pipehead Catchment area in February 1987 to locate suitable areas for free-feeding and poisoning. The trial began on March 5 and ended on March 30, 1987.

Progress of the trial

Feral pig numbers in the catchment appeared to be fairly low compared with previous years. There were scattered signs of activity on both sides of the Pipehead Dam, and 3 sites on the south side were selected for free-feeding. Free-feeding with sow feeder pellets was carried out daily by Water Authority staff under APB supervision. The pellets were placed on the surface; it had been hoped to bury pellets and bait but this was impossible due to the saturated soil at the one site where pigs ate the free-feed. The free feeding was carried out from the 5th to the 22nd March; by the end of this period 20 kg of pellets was being eaten daily at one site while the other two were virtually untouched. Numbers of pigs using the active site were hard to estimate, but at least 4 adults and several young pigs were certainly present.

On 23rd March all the remaining free feed was buried and all 3 sites were baited with pellets poisoned with 1080. For the first time 1080 was used at half the usual rate, giving 2000 mg of 1080 to each 7 kg of bait. The reduced rate of 1080 was used because earlier trials indicated that feral

pigs ate 3-5 times the required lethal dose; halving the concentration should reduce non-target hazards while still ensuring a lethal dose.

A total of five 7 kg mixes were laid, 3 at the active site (i.e. 21 kg of pellets and 6000 mg 1080) and one each at the other two sites. The baiting was carried out by Ron Pryde, APB District Officer at Byford.

Light rain fell in the area on the night following the baiting (0.2 mm at Pipehead, 0.8 mm at Serpentine Main Dam), but was not considered sufficient to cause substantial loss of 1080 from the bait.

The areas of the baited sites were inspected on the morning after the bait was laid. At the active site about 10 kg of the poisoned pellets had been eaten by pigs; no feeding had occurred at the other sites.

Where the bait had been eaten there were signs of considerable pig activity. Vomitus containing pellet material was found within 50m of the bait. No carcasses were found in spite of an extensive search.

By the morning of 25th March a further 3 kg of poisoned bait has been eaten at the active site, and more fresh vomitus was found nearby. No feeding by pigs had occurred at the other 2 sites, but the bait at one site had been disturbed by birds which may have eaten a few pellets.

All the remaining poisoned bait was collected and deeply buried. Ten kg of free feed pellets were placed at the active site in case any pigs returned.

A further search in the area of the active site failed to locate any carcasses.

On the 27th March all the free feed at the active site had been eaten by pigs, and there were still signs of several individuals in the area. A further 3 mixes of poisoned pellets (21 kg of pellets with 6000 mg 1080) were laid at this site by APB research staff.

A fox showing symptoms of 1080 poisoning was found dead about 1 km from this site. No pellets were present in its gut but the fox had vomited; foxes are known to have eaten poisoned pellets in previous trials.

By March 30th 5 kg of the second batch of poisoned bait had been eaten by pigs, and there were a few fresh pig tracks nearby.

The area was again searched extensively by 3 APB staff and 5 Water Authority staff. No carcasses were found apart from a second fox, apparently dead since the first baiting.

All remaining poisoned bait was deeply buried and the trial was ended. A final visit to the area was made on 6th April. Tracks of one adult pig and one sucker were found at the active site, but there had been no other activity in the baited area in this time.

Conclusions

Results of the trial were not conclusive. The free feeding was quite successful and a large quantity of poisoned bait was taken.

No baited pigs were found after the poisoning; they may have moved a long distance before dying, may have died in thick cover and been missed in the searches, or may have survived sub-lethal doses. The 1080 concentration used should certainly have been lethal. Vomiting is a common symptom of 1080 poisoning in pigs and there was no evidence that the lower 1080 concentration led to increased vomiting.

Subjective assessments of pig activity in the area (fresh tracks, wallows, rooting etc.) indicated a reduction in activity following the baiting, but this could not be quantified.

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