

Control method: Baiting of feral pigs with PIGOUT 1080 baits

Assumptions:	<ul style="list-style-type: none"> ▪ Best practice is followed in accordance with the standard operating procedure PIG006. ▪ Assumes that baiting is avoided during farrowing period where possible in accordance with the SOP. The effect on dependent young is not taken into consideration with this assessment only the impact on the target animal. ▪ Note that PIGOUT bait contains a waxed pellet of 1080, so delivers a specific dose. PIGOUT also has longer delay to onset of symptoms compared with conventional 1080 pig baits, but this does not affect humaneness.
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PART A: assessment of overall welfare impact

DOMAIN 1 Water or food restriction, malnutrition					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 2 Environmental challenge					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 3 Disease, injury, functional impairment					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 4 Behavioural or interactive restriction					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
DOMAIN 5 Anxiety, fear, pain, distress, thirst, hunger					
No impact	Mild impact	Moderate impact	Severe impact	Extreme impact	
↓					
Overall impact					
No impact					
DURATION OF IMPACT					
Immediate to seconds	Minutes	Hours	Days	Weeks	

SCORE FOR PART A:	1
Summary of evidence:	Note that Part A of the assessment examines the 'impact on the animal prior to the action that causes death'. Part B then looks at the 'actual mode of death' and the 'extent and duration of suffering caused'. With ingestion of lethal toxic baits there is usually little or no impact in Part A.
Domain 1	No impact in this domain.
Domain 2	No impact in this domain.
Domain 3	No impact in this domain.
Domain 4	No impact in this domain.
Domain 5	No impact in this domain.

PART B: assessment of mode of death

Time to insensibility (minus any lag time)				
Very rapid	Minutes	Hours	Days	Weeks
Level of suffering (after application of the method that causes death but before insensibility)				
No suffering	Mild suffering	Moderate suffering	Severe suffering	Extreme suffering

SCORE FOR PART B:	E-F
Summary of evidence:	
Duration –	After a pig has ingested PIGOUT® baits there is a latent period, usually between one and several hours, before signs such as salivation, jaw chomping, vomiting, increased lethargy, and laboured respiration are observed. The delayed onset of symptoms associated with PIGOUT® baits, compared to feral pigs poisoned with unbound 1080, is due to the hydrophobic core not completely breaking down until it reaches the duodenum of the animal ¹ . Time to death is variable depending upon amount 1080 absorbed but has been estimated to be around 6 hours after bait ingestion under field conditions ¹ . With low suboptimal doses, pigs can take a number of days to die, but may not show symptoms for much of this time.

Suffering –

Prolonged or profuse vomiting is a prominent early sign in most but not all cases of 1080 poisoning in feral pigs, occurring approximately 1 to 5 hours after ingestion^{2,3}. Although in some studies, vomiting has not been observed (for example, Twigg et al.⁴ and McIlroy⁵) it is possible that pigs will re-ingest vomit, and this could perhaps account for the lack of vomiting reported in some cases.

Other clinical signs of poisoning include increasing lethargy and laboured respiration often with a white froth around the mouth and nostrils⁵. Some pigs also exhibit signs of central nervous system disturbance including hyperexcitability, squealing, manic running, paralysis or convulsions, followed by coma and then death. Other animals may lie quietly, breathing slowly and laboriously until death⁵. Although convulsions occur in pigs poisoned with 1080, they are not as common as in canids.

It is important to note that many of the observations of 1080 poisoning in feral pigs are based on pen trials and there is a lack of field-based knowledge of clinical signs, therefore it is difficult to make a clear assessment. Nevertheless we can presume that there is minimal pain or distress during the latent period; however pigs are likely to experience nausea and discomfort before and during vomiting and retching.

In the later stages, when severe CNS dysfunction has developed, it is unknown if animals are perceiving pain. Perception of pain by the animal requires that it is conscious⁶. With 1080 poisoning it is difficult to assess if animals are conscious after collapse or during convulsive episodes⁷. If there are periods of prolonged convulsions it is possible that animals are lucid between fits. If animals *are* conscious during the convulsive episodes or if they become conscious afterwards it is possible that they may experience pain and anxiety. There is also potential for injuries to occur after the appearance of clinical signs.

Summary

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OVERALL HUMANENESS SCORE:	1E-F
Comments	

Bibliography

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