Control method: Baiting of feral pigs with 1080

Assumptions:
- Best practice is followed in accordance with the standard operating procedure PIG005.
- 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 1080 is delivered in grain or pellets therefore the dose has the potential to be variable. (Compared with PIGOUT bait that contains a waxed pellet of 1080 to deliver a specific dose).

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

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DURATION OF IMPACT

- Immediate to seconds
- Minutes
- Hours
- Days
- Weeks
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Score for Part A:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Time to insensibility (minus any lag time)</th>
<th>Very rapid</th>
<th>Minutes</th>
<th>Hours</th>
<th>Days</th>
<th>Weeks</th>
</tr>
</thead>
</table>

| 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 ingestion of bait containing 1080 there is a latent period of around 1 to 2 hours before initial signs appear. Time to death varies between individual pigs and also the dose of 1080 ingested and absorbed but is usually around 4 to 6 hours after ingestion under field conditions\(^1,2\). 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\(^1,3\). Although in some studies, vomiting has not been observed (for example, Twigg et al.\(^4\) and McIlroy\(^5\)) 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 nostrils\(^5\). 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 death\(^5\). 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 conscious. With 1080 poisoning it is difficult to assess if animals are conscious after collapse or during convulsive episodes. 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**

<table>
<thead>
<tr>
<th>CONTROL METHOD:</th>
<th>Baiting of feral pigs with 1080</th>
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<tbody>
<tr>
<td>OVERALL HUMANENESS SCORE:</td>
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**Bibliography**