



# Wildlife Animal Ethics CommitteePreferred Field Euthanasia Techniques

**(Following DBCA SOP SC23-10 Euthanasia of animals under field conditions 2023)**

The word euthanasia means an easy death and should be regarded as an act of humane killing with the minimum of pain, fear and distress.

Euthanasia for a range of animal species is occasionally necessary during animal research programs or for management of pest animals. Therefore, all researchers and personnel involved with animal handling must be familiar with the approved euthanasia methods for the range of species they are or may be handling (both target and non-target) and have the appropriate equipment available so that euthanasia can be performed effectively and quickly. This includes the necessary drugs if chemical euthanasia is to be undertaken.

Many recommended methods of euthanasia for captive animals are not feasible under field conditions; however, the challenges presented by field conditions should not lessen the ethical obligation of the operator to reduce pain and distress to the greatest extent possible during euthanasia.

When completing a WAEC new application form, only select the euthanasia method(s) that is / are applicable to the animals you are or may be handling.

### Primary and secondary methods of euthanasia (one or two-step process)

If a euthanasia method causes unconsciousness but does not cause death a second method (step) is required to quickly and efficiently ensure death. The primary method is the first step, and secondary method is the second step. Primary and secondary do not refer to order of preference in techniques.

The CI / animal handler should always plan for how to achieve euthanasia if the primary method is unsuccessful. One option for secondary method is to repeat the primary method.

Signs of consciousness which may indicate that death has not occurred after a euthanasia attempt include:

* Natural spontaneous blinking of the eyes.
* Pupils usually remain constricted (pupils dilate with death)
* Eyelid closure/blinking in response to lightly touching of the cornea/eyeball.
* Rhythmic breathing (ribs moving in and out).
* Detectable heartbeat (place fingers on left front leg / arm just behind / near the elbow)
* Lifting the head or trying to stand up.
* Presence of a withdrawal reflex (pulling back) on pinching a toe/extremity
* Vocalising.

## Preferred euthanasia techniques

| Animal type | Primary method | Secondary method |
| --- | --- | --- |
| Mammals <300g (e.g. microbats, rodents, small dasyurids) | * Blunt force trauma OR
* Cervical dislocation (rodents < 200g) OR
* Decapitation (<200g) OR
* Pentobarbitone injection (Intrathoracic or intraabdominal)
 | * Decapitation after blunt force trauma (>200g)
 |
| Other mammals 300 g – 3 kg (e.g. chuditch, quenda, rabbits) | * Shooting
* Blunt force trauma
* Sedation
 | * Pentobarbitone injection after sedation (>300g); Intravenous only > 2kg
 |
| Macropods - adults > 300g | * Shooting OR
* Captive bolt device (Captive bolt device) OR
* Blunt force trauma
 | * Pentobarbitone injection after blunt force trauma recommended, Intravenous if > 2 kg.
 |
| Macropods - pouch young (py) | * Blunt force trauma OR
* Cervical dislocation (unfurred py <5cm) OR
* Decapitation (unfurred py <5cm)
 | * Decapitation after blunt force trauma (unfurred py >5cm)
 |
| Macropods - young at foot | * Blunt force trauma (<5kg)
* Captive bolt device
 | * Pentobarbitone injection after blunt force trauma recommended, Intravenous if > 2 kg.
 |
| Dingoes, foxes and cats | * Shooting
* Captive bolt device
* Sedation
 | * Pentobarbitone injection after sedation (>300g); Intravenous if > 2kg
 |
| Cetaceans, sirenians and pinnipeds | * Shooting
* Sedation
 | * Pentobarbitone injection after sedation; Intravenous only > 2kg
 |
| Domestic stock (e.g. sheep, cows) | * Shooting
* Sedation
 | * Pentobarbitone injection after sedation (>300g); Intravenous only > 2kg
 |
| Birds | * Blunt force trauma
* Cervical dislocation (<200g)
* Decapitation (<200g)
* Shooting (>2kg)
 | * Decapitation after blunt force trauma (>200g).
 |
| Lizards and snakes | * Blunt force trauma
* Sedation
 | * Pentobarbitone injection Intravenous after sedation (>300g)
 |
| Freshwater turtles | * Blunt force trauma
* Sedation
 | * Pentobarbitone injection Intravenous after sedation (>300g)
 |
| Marine turtles - adults | * Captive bolt device
 | * Pentobarbitone injection Intravenous after sedation
 |
| Marine turtles – juveniles < 300g | * Blunt force trauma
 | * Pithing after blunt force trauma
 |
| Crocodiles – adults >2m | * Shooting
 |  |
| Crocodiles - < 2 m  | * Captive bolt device OR
* Cervical spinal cord severance OR
* Sedation
 | * Pithing
* Pentobarbitone injection Intravenous after sedation
 |
| Crocodiles - hatchlings | * Decapitation
 | * Pithing after decapitation
 |
| Amphibians (e.g. frogs, cane toads) | * Blunt force trauma OR
* Benzocaine gel (Oralgel)
 | * Decapitation or pithing after stunning
* Pentobarbitone injection Intravenous
 |
| Fish | * Blunt force trauma OR
* Decapitation OR
* Immersion in Eugenol (clove oil)
 | * Pithing after decapitation
 |

The Chief Executive Officer of the Department of Primary Industries and Regional Development and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Copyright © State of Western Australia (Department of Primary Industries and Regional Development), 2024.

