

Recommended Crab Euthanasia Protocol

Overview:

Spiking can be used as an effective 1st step in humanely euthanizing Brachyuran crabs. A two step euthanasia is highly recommended to ensure the animal does not experience prolonged suffering. Freezing or air chilling at very low temperatures can be used as a 2nd step with this method but freezing alone or as a primary method is not considered a humane method. Spiking is using a sharp pointed object (e.g. a thick, pointed pithing instrument, an awl or a sharp-pointed knife) to rapidly destroy the ganglia or central nervous system of a crab. This works well specifically for crabs because they have 2 large nerve centers (Fig. 1) that are easily accessible to spike. Some Decapods have a line of multiple nerve centers going down its body making spiking an improper and inefficient method of euthanasia for some other crustaceans such as lobsters and hermit crabs. If a crustacean with such a body plan requires euthanasia, splitting the body lengthwise from head to tail with a knife works as an effective alternative to spiking. However, this limits its viability to use as a food source for other captive animals.

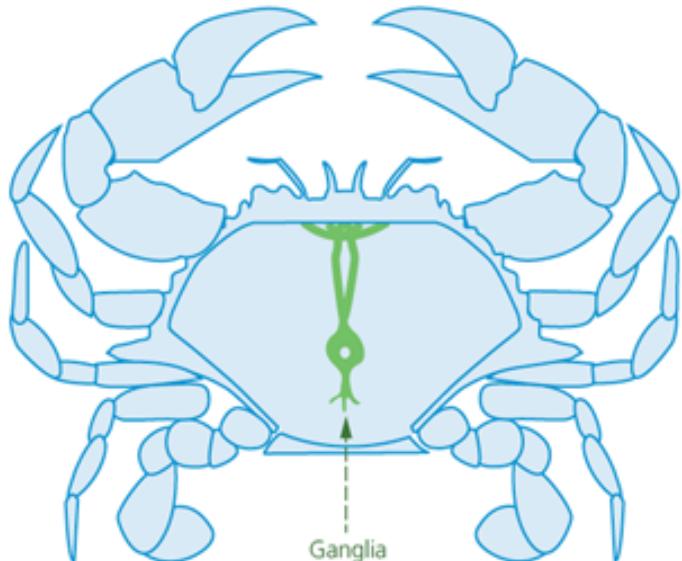


Fig. 1: Ganglia in crab showing 2 nerve centers.

Tools:

- A Phillips-head (+ tipped) screwdriver may be the most accessible and efficient tool to use.
- A knife may also be used but it may pose a greater safety concern for the person performing the spiking.

Notes:

- A crab's claw strength can be much stronger than expected compared to the size so be careful to not allow it to get a good grip on you while doing this procedure. Grabbing/holding it from the posterior (butt) end may allow for safer handling.

- After the procedure, the crab may still exhibit a little movement. This may simply be the muscles contracting after death but check for unresponsiveness and limpness of the limbs as there may be a chance the ganglia was not completely destroyed.
 - If unsure if the crab is still alive or not, wait a couple seconds and then ensure there is no reaction to stimuli (crab does not react to handling or touching) and there is no strength in the legs and claws before freezing.

Method

1. Flip the crab so the bottom side is facing up.
2. Locate the 2 spiking locations and align the spiking tool at the first designated point near the edge of the tail flap (Fig. 2).
3. Angle the tool at around an 85 degree angle to the body slightly pointing the point away from the head (Fig. 3).
4. Push the tool past the carapace all the way through until the inside of the top shell is felt.
 - a. There is no need to push past this layer as the nerve center is located around the center of the body between the top and bottom.
 - b. At this point, the tool can be twisted to ensure destruction of the nerve center.
5. Align the spiking tool at the second designated point near the near and angle it at around a 60 degree angle towards the tail (Fig. 2 and 3).
6. Push through the carapace ensuring the tool has gone past the nerve cluster to the top shell.
 - a. As with the first nerve center, the tool can be twisted to ensure destruction.
7. Freeze the crab to ensure euthanasia.

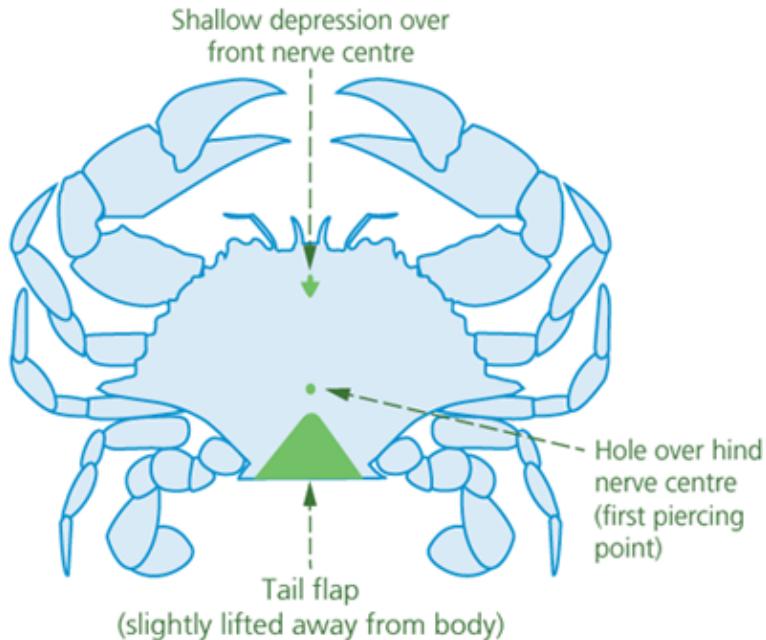


Fig. 2: Spiking locations.

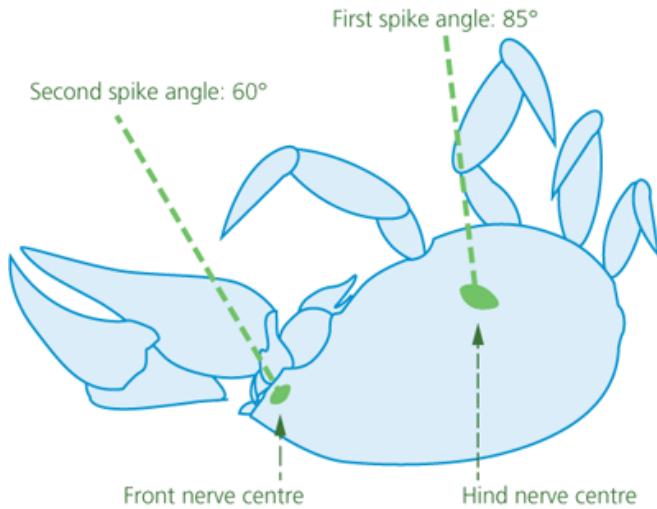


Fig. 3: Spiking locations and angles (side view)

Sources:

https://kb.rspca.org.au/what-is-the-most-humane-way-to-kill-crustaceans-for-human-consumption_625.html