

Humane Euthanasia - Feb2022

Euthanasia is elected for several reasons, and in most cases the veterinary staff will make this difficult decision and perform the procedure. In some cases, raptors admitted to ICU have a very poor prognosis and are suffering, and the most humane choice is to perform euthanasia immediately. In this case triage and/or lead ICU volunteers can perform this procedure. The raptor is first administered Isoflurane to reach a very deep plane of anesthesia, and then administered CO2, which results in a quick and painless euthanasia.

*Deciding to euthanize can be difficult, please reach out to vet staff or other lead volunteers if needed or administer pain medications and wait until staff/leads can assist if you are unsure. *

1. Select the correct size mask and wrap with vet wrap for the best fit on your patient. The largest masks are used for owls/eagles, the smaller cone is for Red Tail Hawks and smaller raptors. You can make the opening for the mask smaller or larger by wrapping or unwrapping the vet wrap.
2. Make sure there is Isoflurane and oxygen in the machine. The Isoflurane level can be read at the round glass viewing chamber on the front of the vaporizer. The oxygen level can be seen once the tank handle is turned counterclockwise, and the regulator is checked.
3. Turn on the isoflurane by pressing the small black lever on the dial, and then rotate the dial counterclockwise all the way to 5%.
4. While restraining the raptor properly, place the facemask over its entire head.
5. Set the O2 flow rate dial (small green knob) at 1.5-2 liters per minute by turning the knob counterclockwise until the silver ball is hovering at that level.
6. Isoflurane gas is now being delivered, and with each breath your raptor will get to a deeper level of anesthesia. After 2-3 minutes, the bird should be anesthetized. There should be no tension in the legs or wings, and no response when the toes are pinched. Each bird responds differently to anesthesia, so some may take 4-5 minutes or longer to reach this level.
7. **For extra precaution talons can be wrapped with vet wrap at this point to prevent any accidental taloning if the bird startles at any point. This is required for GHOW and BAEA.
8. Listen to the heartbeat with the stethoscope to be sure you can determine the proper location to listen for the absence of a heartbeat after the next step.
9. Turn on the CO2 tank knob on top of the tank, turning counterclockwise.
10. Disconnect the anesthesia machine tubing from the facemask and attach the hose from the CO2 tank to the facemask.
11. Turn the CO2 flowmeter knob (tiny silver rod at the bottom of the flowmeter) counterclockwise until the silver ball hovers around 10 liters per minute. Turn the oxygen knob on the anesthesia machine off.
12. After 1 - 3 minutes, or more depending on the individual raptor, check for a heartbeat with the stethoscope. When the heartbeat can no longer be detected, and no breathing can be seen, shut off the CO2 flowmeter.

13. Once the bird has been humanely euthanized, make sure you have turned Isoflurane, Oxygen, and CO2 off.
14. Thoroughly document all wounds/symptoms with a written description, photographs, and radiographs (if taken). These notes need to be entered into RaptorMed, or forwarded to appropriate staff to be entered, as soon as possible.

Final Checklist:

- Turn the O2 flow rate back to zero
- Turn off the O2 tank
- Turn off the CO2 tank
- Turn the isoflurane dial back to zero
- Disconnect the facemask from the anesthesia machine, remove vet wrap, and wash with dishes.
- Place the deceased raptor in a plastic bag in the ICU freezer if no necropsy will be performed, place in the sample refrigerator (top refrigerator in ICU) if a necropsy will follow, or if you are unsure.
- Clean/disinfect treatment table and stethoscope.
- Update appropriate volunteers/staff, forward on notes/pictures or enter in RaptorMed

****This protocol is a written supplement to in-person training. Volunteers must be trained in-person by the vet tech or a trained ICU lead before performing this procedure.**