

Group Members: _____

Date: _____

Honors Anatomy Practical Exam/Necropsy Protocol

Purpose of necropsy: To determine exact cause of death (e.g. blunt head trauma, internal bleeding) and to experience the internal anatomy of local wildlife.

Necropsy Procedures:

1. Put on goggles, gloves, and lab coat as you enter necropsy space
2. Go to designated table for necropsy, assign roles (see Table A below)
3. Decide who's phone will be used for photographic evidence (_____ 's phone will be used)
4. Examiners get animal from bin and place dorsal side down

Group Roles (rotate through the day - everyone has to do each role at least once):

1. **Examiner A** (primary person performing necropsy, all incisions are approved by examiner A)
2. **Examiner B** (secondary person performing necropsy)
3. **Recorder/Researcher** (records data and informs decisions based on anatomy diagrams provided)
4. **Photographer** (uses designated phone to capture all necessary photos. Communicates with recorder time of each photo - a way to know which photo goes with what organ)

Table A. Please sign up for your roles throughout the day. Note that your role will change ~every hour. You MUST take on each role throughout your necropsy.

Time	Roles
8:30-9:15	SET-UP/INTRO - Everyone
9:15-10:15	Examiner A: Examiner B: Recorder/Researcher: Photographer:
10:15-11:15	Examiner A: Examiner B: Recorder/Researcher:

	Photographer:
11:15-11:25	CLEAN UP FOR LUNCH - Everyone
12:40-1:20	Examiner A: Examiner B: Recorder/Researcher: Photographer:
1:20-1:40	Examiner A: Examiner B: Recorder/Researcher: Photographer:
2:00-2:30	CLEAN UP / REFLECTION - Everyone

Common name: _____

Scientific name: _____

Sex (circle): M / F

Length (nose to base of tail, in cm): _____

Necropsy Procedures (continued):

1. External examination revisited:
 - a. Revisit external anatomy datasheet (previously filled out during fieldwork)
 - i. Note any key abnormalities that you'd like to revisit during internal examination
 - b. Revisit hypotheses on probable cause(s) of death
2. Internal examination (use Table B throughout process):
 - a. Make an incision (using scalpel and scissors) from trachea to genitals
 - b. Slightly peel and cut (using scalpel) pelt/fat away from muscle
 - c. Use scalpel to cut through muscle.
 - d. Use scissors to cut through sternum.
 - e. Open up ribcage and look for the organ systems listed below.
3. Rotate animal and make incisions to expose all potential abnormalities (see external examination).
4. Please continue external and internal exam throughout exhibition. **MAKE SURE TO KEEP THE ANIMAL IN EXHIBITION FORM (EXPLORE BUT DO NOT TEAR IT APART).**

Table B. Fill out the left side of the table with the correct system. Check off each organ as you find it, and take an accompanying photograph (record the time photo was taken). Write down any observations you have relating to the cause of death. **UPLOAD ALL PHOTOS INTO GOOGLE DRIVE AND SHARE WITH GROUP!**

System	Organs	Time of photo	Observations
<i>Skeletal System</i>	<i>mandible</i>	<i>9:54 am</i>	<i>The mandible is shattered</i>
	Heart Blood vessels Blood	_____ _____ _____ _____	
	Mouth Pharynx Esophagus Stomach Small intestine Pancreas Gallbladder Liver	_____ _____ _____ _____ _____ _____ _____ _____ _____	
	Thyroid + Parathyroids Adrenals Pancreas Ovaries/testes	_____ _____ _____ _____	
	Skin Lungs Kidneys Bladder Large intestine	_____ _____ _____ _____ _____	

	Thymus Spleen	_____ _____ —	
	Skin Fur/hair Nails	_____ _____ _____ —	
	Skeletal muscle Smooth muscle Cardiac muscle	_____ _____ _____ —	
	Brain Spinal cord	_____ _____ —	
	Male: Testes Penis Female: Ovaries Fallopian tubes Uterus Vagina	_____ _____ _____ — _____ _____ _____ _____ _____ —	
	Nose Sinuses Pharynx	_____ _____ _____	

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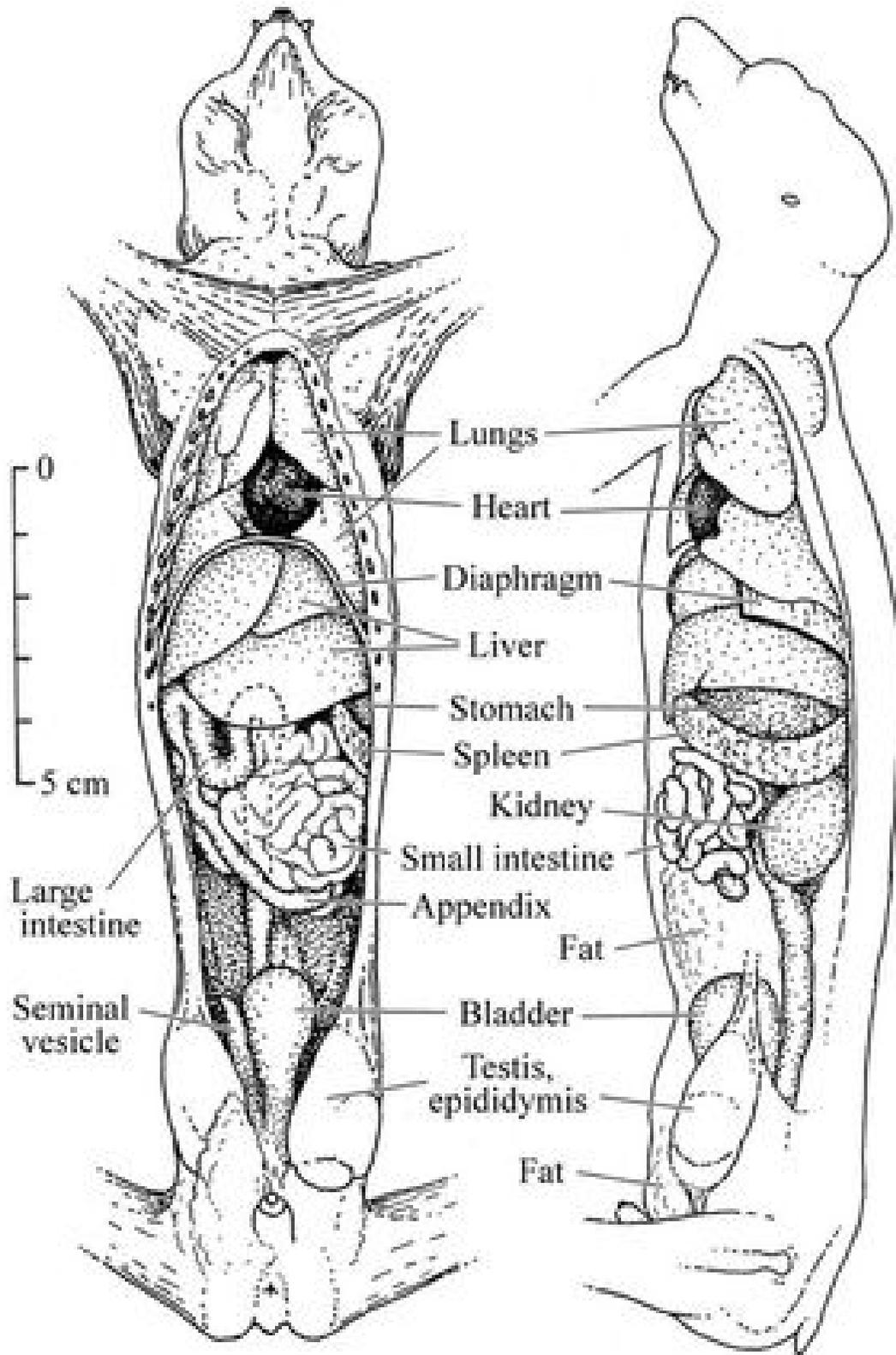
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From your external and internal examination, what do you think is the probable cause of death?

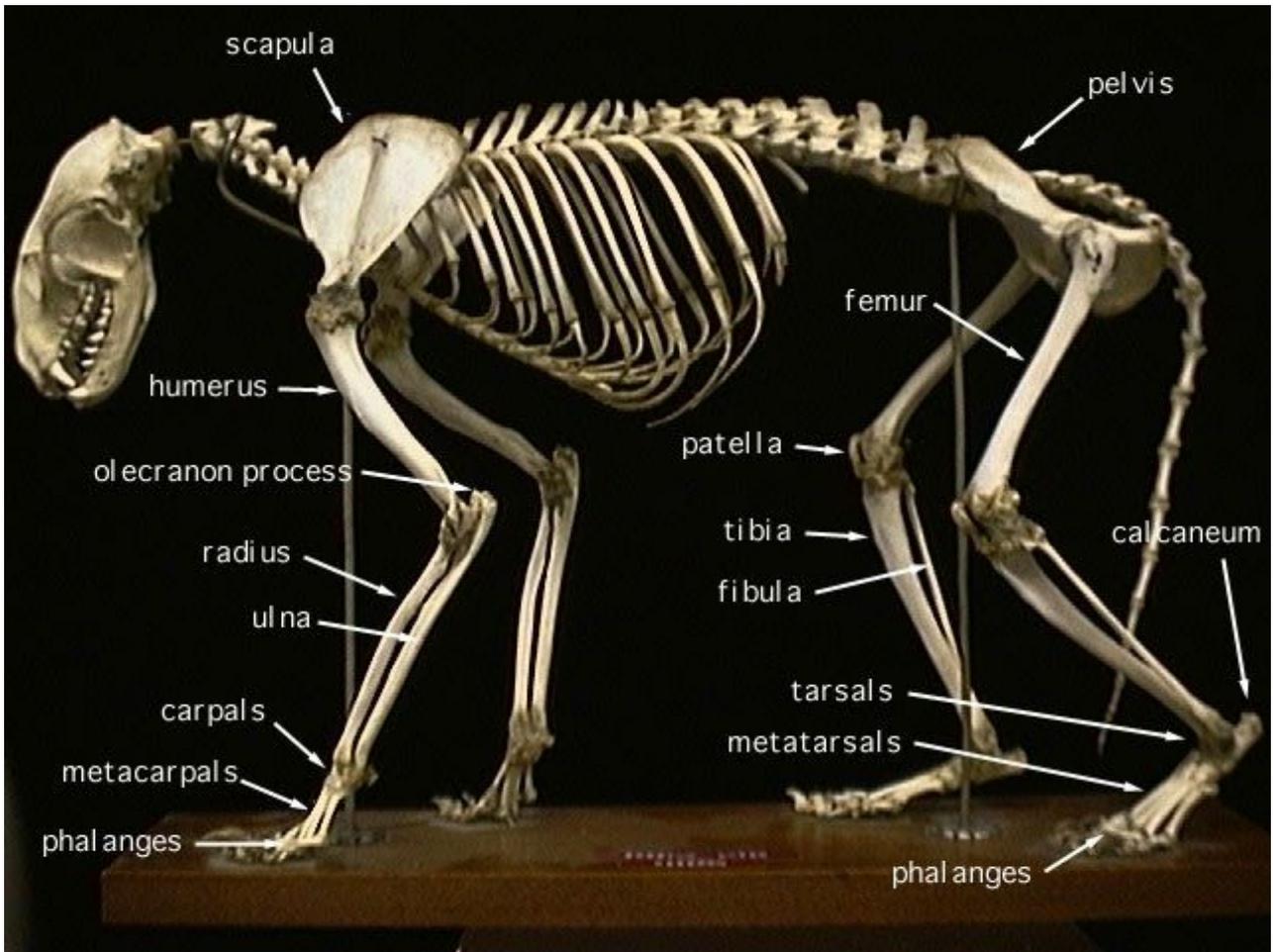
Cleanup procedures:

1. Place all animal remains and trash (used gloves) in a new trash bag within our designated trash bins.
2. Wipe off all large debris on tools (scalpel, scissors...) and then wipe using alcohol.
3. Clean all plastic/metal containers where organs were stored.
4. Spray and wipe off plastic on tables using disinfectant.
5. Bring tables and all materials back into junior wing courtyard.
6. Set up tables for tomorrow's necropsies.
7. Wash hands!

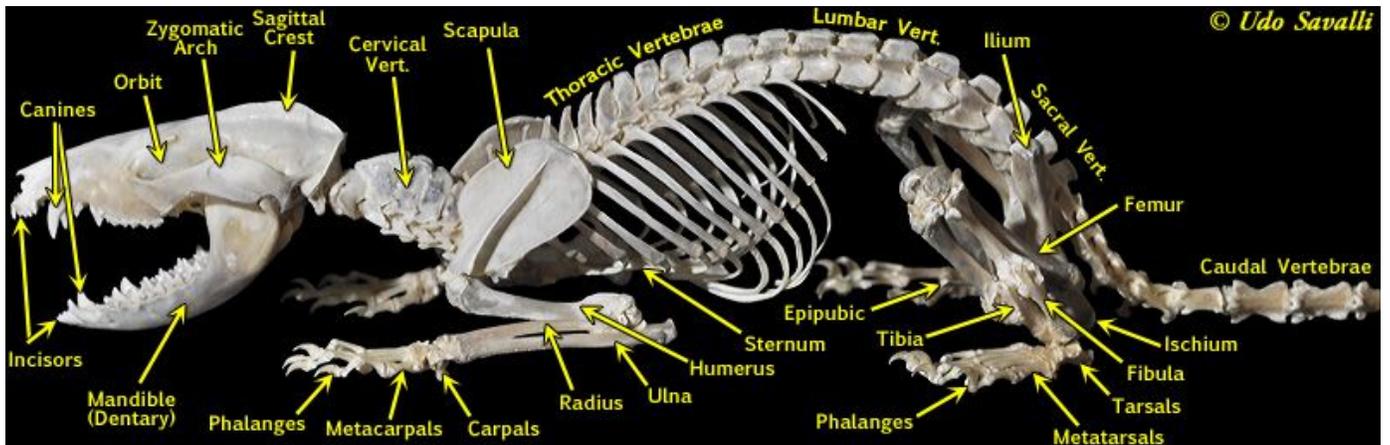
RACCOON/OPOSSUM ORGAN SYSTEM ANATOMY



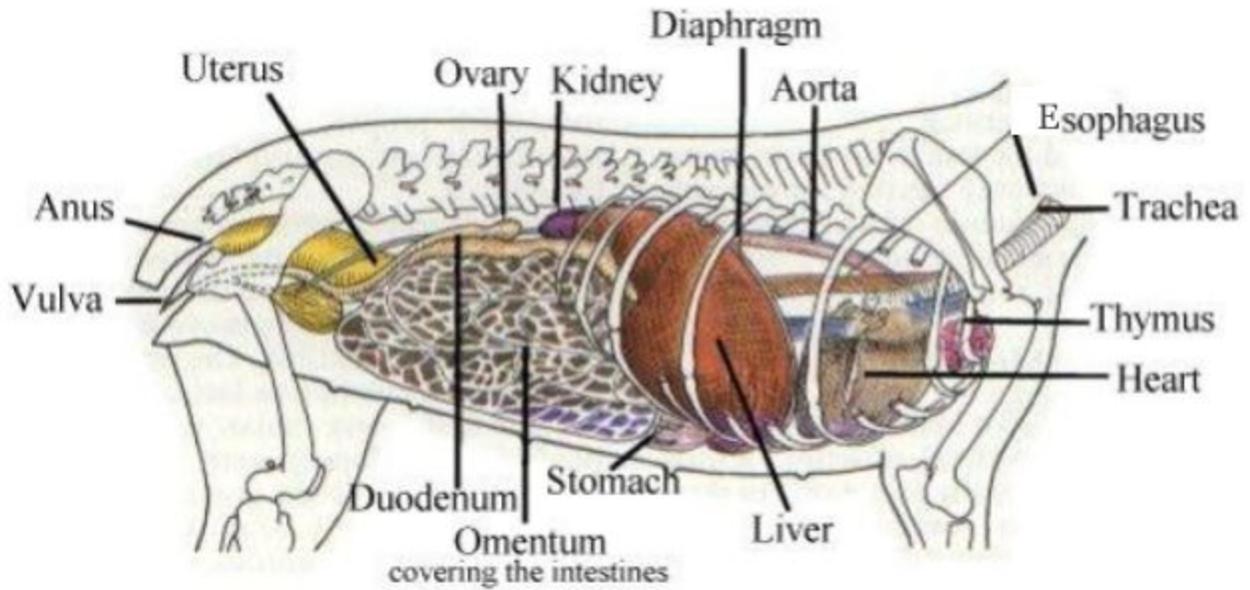
RACCOON SKELETAL SYSTEM ANATOMY



OPOSSUM SKELETAL SYSTEM ANATOMY



COYOTE ORGAN SYSTEM ANATOMY



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