Sparsholt College Hampshire

BSc. (Hons) Animal Management

Example: Necropsy Instructions for Domestic Fowl *(Gallus gallus domesticus)*

- Check ID to ensure that you are dealing with the correct animal
- Weigh
- Take measurements
- Always check the uropygial gland (preen gland) when dealing with avian species
- Choanal slits in the roof of the mouth
- Soak carcass in water
    - Holds feather down
    - Prevents spread of dust/ down and pathogens

- Incise between the pectoral muscles
- Only reflect the beak if not a cosmetic necropsy
- Birds have two layers of pectoral muscles
    - Superficial and deep
    - Compartment syndrome where the deep layer becomes necrotic can be missed
    - Caused by capture myopathy

- Examine the sciatic nerve
    - This can be site of many diseases
        - E.g. Newcastle disease
    - Especially in Galliforme birds

- Check for any exudates / arthritis on bones
    - Inadequate flooring has been changed due to necropsy findings
- Foot pads (plantar) show signs of bad flooring or bumblefoot
- Always break a bone
    - Should be a sharp snap
    - Rubbery bones = calcium deficiency
    - In birds, airspaces in the large bones means you should chose the tibiotarsus

- Lead (poisoning) can compete with calcium and cause skeletal problems
- Cut alongside of breast bone (sternum) as it very strong and difficult to cut through
- Observe all the organs in the correct place before removal
    - Check for any missing or incorrectly placed organs
- Air sacs should be clear
- Begin with the top organ and work down
- Heart
- Thyroid
- Spleen
    - Easy to remove
    - Located at the back of the proventricular junction

    - Splenic form varies a great deal
        - Ovoid
        - Pyramidal (wildfowl)
        - Slender

- Liver and Gall Bladder
    - One lobe (usually the left) is larger

- Gall bladder is variable
- When taking out GIT always include the cloaca
    - Allows for inspection of the Bursa of Fabricius in young birds

- Not all birds have a crop
- Thymus is two pink chains either side of the neck
- Gizzard also varies
    - Non-existent in raptors
    - Hard and muscular in seed-eaters

- Ileum is located next to the ileocaecal colic junction
- Caeca can be very important
    - Well developed or rudimentary

- Colon is well developed in flighted birds
- Peel back the koilin (cuticle layer) from the gizzard
    - Allows for any parasites to be detected

- Lungs can show different adaptations due to lifestyle
- Fit tightly into the back of the ribs
    - Hard to remove

- More rigid that mammalian lungs
- Kidneys are located close to the sciatic nerve
- Open the skull and check for sinusitis
    - Any pus or discharge

- Take samples ‘as you go’
    - Especially important if performing any bacteriology
        - Soft tissue can dry out / degrade rapidly

- The necropsy lab is difficult to keep sterile
- If less than or equal to 3 bacterial spp found in a lesion then they may be significant to the cause of death
- If over then there has been contamination and it is not a viable sample
- Histological samples should be preserved in formalin
    - Not too thick as they will rot before fixation
- Always try and preserve the thymus and bursa in juvenile birds
    - (Placenta and thymus from a mammalian foetus).