Chronic Wasting Disease Sample Collection: Deer (Mule Deer & White-tailed Deer)

MEDIAL RETROPHARYNGEAL LYMPH NODES & LOWER JAW



Figure 1

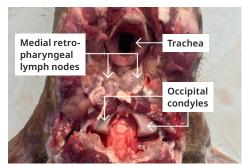


Figure 2

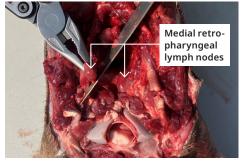


Figure 3

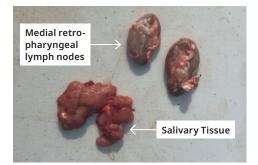


Figure 4

Hunters have the option of submitting the entire head and upper neck of harvested animals, or, hunters may extract and submit the testable tissues themselves. For deer, the testable tissues include the medial retropharyngeal lymph nodes and lower jaw.

Sampling Procedure for Retropharyngeal Lymph Nodes

- 1. Position the head upside down (**Figure 1**). Begin cutting through the throat, starting just behind the lower jaw. Cut all the way through the neck, following the angle of the jaw, to the joint of the first vertebrae and the skull (**Figure 1**).
- 2. Locate the trachea and occipital condyles (**Figure 2**). Lift the trachea and dissect the muscles between the trachea and occipital condyles.
- **3.** Locate the left and right medial retropharyngeal lymph nodes (**Figure 2**), located deep in the tissue halfway between the trachea and occipital condyles. The lymph nodes are round or oval and much firmer and rounder than the surrounding tissue.
- **4.** Grasp each lymph node with forceps or pliers and carefully cut them away from the surrounding tissue, one at a time (**Figure 3**).
- **5.** Note: lymph node tissue can easily be mistaken for salivary gland tissue (**Figure 4**). It is important that the correct tissue type is submitted, because salivary tissue (looks like chewed gum) cannot be used for CWD testing.

EQUIPMENT NEEDED

Gloves, sharp knife or scalpel, forceps or pliers, zip lock bag or plastic jar, permanent marker, bleach.





Figure 5



Figure 6



Figure 7



Figure 8

Sampling Procedure for Lower Jaw

- 1. Insert a sharp knife into the mouth and begin cutting through the cheek and up towards the ear (**Figure 5**), separating any muscle and connective tissue that hold the lower and upper jaws together. Repeat on both sides of the head.
- 2. Once the lower jaw has been loosened, slowly force the mouth open and push the lower jaw down and away from the upper jaw until it separates from the skull. A fair amount of force and additional cutting of connective tissue, tendons, and muscle may be required.
- **3.** Once the lower jaw has been separated, remove any muscle and skin that is still attached to prepare the sample for submission (**Figure 6**).

Packaging and Submitting your Samples

- Label a zip lock bag or plastic jar with the sex and species of your harvested animal, as well as the type of tissue sample being submitted (Figure 7). If using a zip lock bag, place the bag into a hard-shelled container (ex. coffee cup) to ensure the sample maintains its structure.
- 2. Bring the tissue sample and lower jaw to a sample drop-off depot within seven days of harvesting your deer (depot locations can be found on the CWD website below).
- 3. Place both the tissue sample and the lower jaw into the poly bag provided by the depot (Figure 8). Fill in all required information on the Wildlife Sample Receipt Form. Leave the tissue sample, jaw, and sample receipt with depot staff. Take your copy of the sample receipt home.

