



COLLECTING DNA SAMPLES

A sample of an animal's DNA is required to be submitted to a laboratory for Parent Verification and optional genetic recessive genetic condition testing.

DNA can be collected using:


- » **Tissue Sampling Unit (TSU)** samples (preferred method)
- » **Tail hair sampling**
- » **Semen sampling**

Tissue Sampling Units (TSUs) are particularly beneficial and are recommended for collecting samples on young animals. TSUs are no longer single use and can be re-used in the future. When collecting a sample, please ensure that a full sample is contained in the tube.

Tail hair samples - ensure that hair samples are submitted on the correct hair cards for the respective laboratory they are being sent. Contact the AWA for hair cards.


TSU SAMPLING PROCEDURE

Follow steps 1 through to 13




1

Take an assembled TSU. (cutter + connection piece + collection tube)




4

Turn the black end so that the TSU applicator is closed and the TSU is locked into place




2

Turn the black end so that the TSU applicator is open



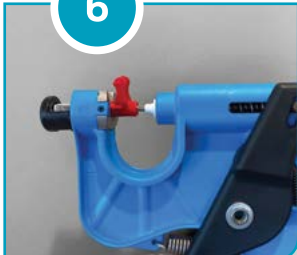
5

Carefully squeeze the applicator handles until the large piston comes to a stop against the red connection piece



3

Insert the TSU as shown in the picture



6

The cutter has now been grabbed. Release the pressure on the handles

TSU SAMPLING PROCEDURE

continued

Remove the red connection piece while holding the red tabs and pushing sideways

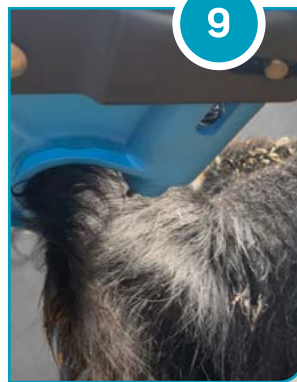
7



The pliers are now ready to use

8

9



Slide the charged pliers over the ear and position the cutter about 1cm to 2cm from the edge of the ear.

Try to avoid large veins and ridges. The sample should be taken in a very swift, fluid motion

10



Remove the TSU tube from the applicator by twisting the black end and sliding the tube out

11



A tissue sample should be clearly visible in the tube

12



You should see the red plug in the end of the TSU if it has sealed correctly

13



Remove the used cutter from the pliers by pushing the handles apart

TAIL HAIR SAMPLING PROCEDURE

Follow steps 1 through to 7



STEP 1

Pull (do not cut) hair from the tail switch (tip of the tail) not the tail head. Pull hair in the opposite direction from which the hair is laying, this will result in less breakage.



STEP 2

Make sure hair is free from fecal material and dirt. Save the hair roots (follicles), which contain the DNA.

Roots must be clearly visible. Approximately 30 hair roots are needed. For animals with finer hair, a minimum of 50 hairs are needed.

For animals younger than three months, TSUs are recommended since hair roots will likely not be visible.

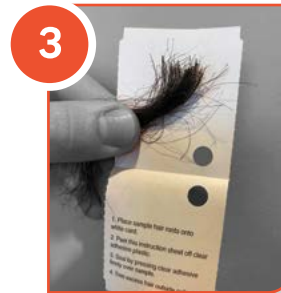
Steps 3 to 7 can be viewed over page

TAIL HAIR SAMPLING PROCEDURE

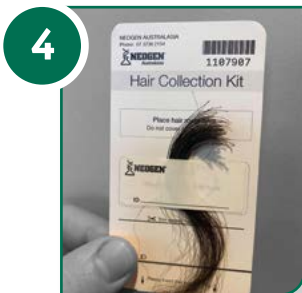
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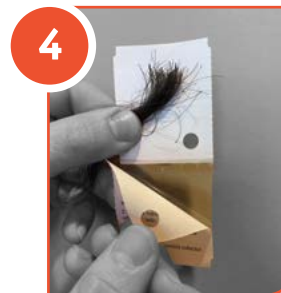
Grab the Neogen Australasia Hair Collection Kit card, place the hair roots on the instructed section.



Grab the Zoetis Hair Collection kit, open it up and place the hair roots onto the white card.



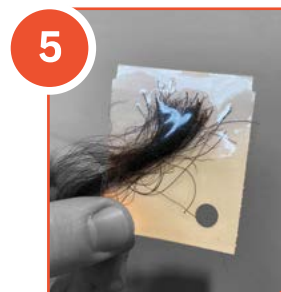
Using the supplied ID label (or tape of your own). Stick the hair to the card as instructed on the card.



Peel the instruction sheet off the clear adhesive plastic.



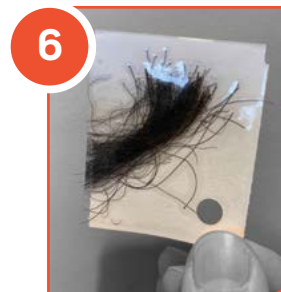
Trim the hair on the directed "trim here" line.



Seal by pressing the clear adhesive firmly over the sample.



Clearly label the ID onto the hair card, this is the same ID that needs to be entered into the AWA DNA Test Request form.



Trim excess hair outside collector.



Place the Collection card with the hair into the supplied plastic bag.

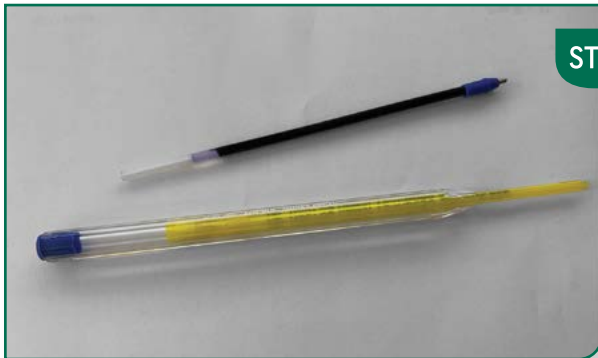


Clearly label the ID onto the hair card, this is the same ID that needs to be entered into the AWA DNA Test Request form.

SEMEN SAMPLING PROCEDURE

Semen samples can be used for bulls where no other type of DNA is able to be collected.

- » Remove the semen straw from the liquid nitrogen and allow it to gently thaw in the refrigerator or at room temperature – do not store at room temperature for long periods of time as it may cause mold
- » Thawed semen straws need to be packaged in a way that they can't bend or break in the mail.
- » Best practice is to place the semen straw inside an empty pen cartridge, by removing the ink tub and sliding the semen straw inside the plastic shell.



STEP 1

Place the **semen straw** inside an empty pen cartridge, by removing the ink tub and sliding the semen straw inside the plastic shell.



STEP 2

Once **semen straw** is inside, put the lid back on the pen so it can't move.