NAGP Testis collection, shipping and sperm extraction protocol

September 2017

When removing the testes we are concerned with the tissue within the boxed area in Figure 1. Do not remove anything from the testis proper.

Figure 1. Diagram of an excised testis. The tissue inside the box in Figure 1 is what should be package and shipped.

Prepare the shipping box prior to preparation of the testes. Reusable ice packs should be placed in the bottom of an insulated box and then bubble wrap should be placed on top of the ice packs so that the testes do not come in contact with the ice during shipping. After removing the testes from the carcass, place each testis in its own plastic sealable bag, labeled with the name of the animal and seal the bags. Place the testes in the insulated box and seal it for overnight shipping and arrival the next morning.

Upon receipt, the whole testis should be washed with 70% ethanol and then rinsed with PBS prior to flushing the epididymides. The cauda epididymides can then be excised from the testis and flushed using a hypodermic needle and syringe filled with room temperature, species-specific isotonic saline solution.

Alternatively, the clean, excised epididymides can be placed in a petri dish and eviscerated to remove the sperm. The concentrated sperm can be diluted with the species-specific isotonic saline solution in order to remove it from the petri dish.
Regardless of the technique, the saline solution should always be at room temperature when flushing the cold testes.

After collection from the epididymides the sperm can be frozen using the species specific protocols described on the other pages.