



Beef Cattle DNA Hair Sample Collection Instructions

Please read instructions completely before beginning process. This is required for all beef cattle (market steers, registered heifers, commercial heifers and dairy feeder steers) that you want eligible for the 4-H beef cattle show at the Indiana State Fair. Collection Envelopes are available from your County Extension Office.

1. Gather supplies (brush, pliers and collection envelopes) and secure animal in a chute/head-gate. Use the brush to clean the tail switch area by removing dirt and other contaminants. Make sure area is dry before collecting hair.
2. Be sure pliers are clean and dry. Place the pliers close to the tail and **pull** enough hair such that the sample is about the size of a pencil.
 - a. Be sure to pull the hair directly away from the animal, not at an angle. This will allow the follicle to come out with the hair.
 - b. **Do not cut the hair** from the animal as the roots must be present for DNA analysis.
3. Repeat process, 2-3 pulls may be necessary to get enough hair (a minimum of 30 hairs).
4. Visually inspect hairs to ensure follicles are attached. If follicles are not present, discard sample and start over.
5. Place the sample directly into the self-sealing collection envelope and complete the appropriate information on the front of the envelope. Avoid touching the hairs and using plastic bags.
6. Repeat the process for remaining animals. Clean/disinfect pliers and hands between collections to prevent contamination of sample. Animals that are co-enrolled with siblings only need one sample. Just be sure to list all siblings on the envelope.
7. The sealed collection envelopes with the information completed on the front of envelope should be turned into the County Extension Office at the same time as the animal ID deadline in Indiana 4-H Online: April 1 for market steers and May 15 for registered heifers, commercial heifers and dairy feeder steers (or earlier deadline set by county).
8. A “how-to” video is available on the Indiana 4-H Beef Project page:
<https://extension.purdue.edu/4h/Pages/project.aspx?proj=2>

For questions about this process or 4-H beef cattle ID, please contact your county 4-H Educator, or Courtney Stierwalt (dickerso@purdue.edu; 765-494-8435).