Collection of Blood and Hair Samples from Bison at Ft. Niobrara NWR for DNA Analysis

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James Derr, Joe Templeton, Natalie Halbert
College of Veterinary Medicine
Texas A&M University

Far over the hill The roundup begins.....



Can you hear the thundering herd?



The final push to the corrals.



Remember, dust washes off.



They are here......



Now pen 'em up.



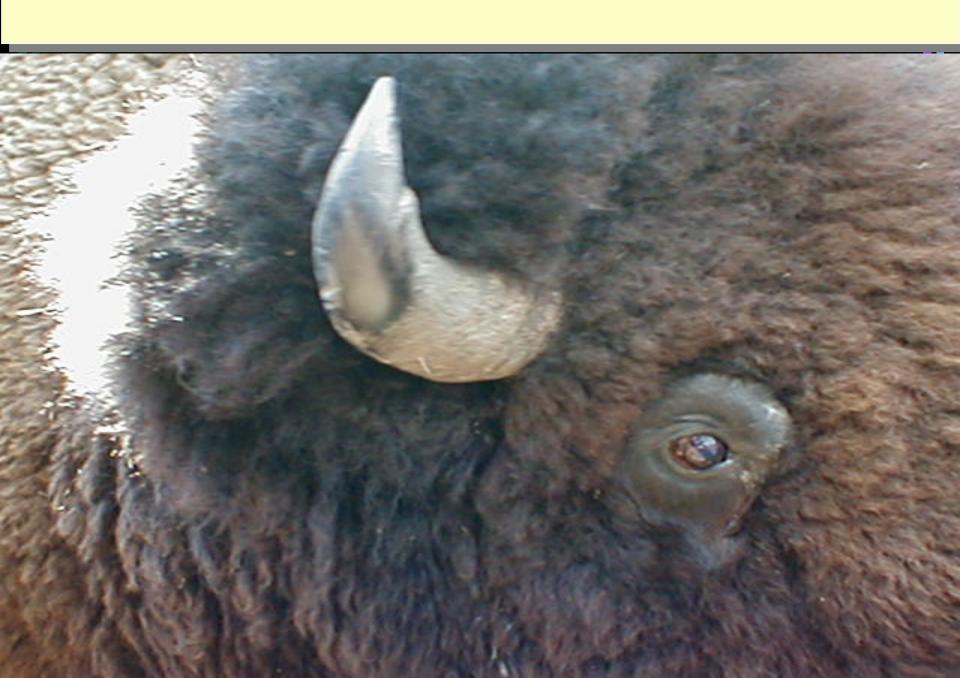
Separate bulls, cows, calves, as necessary.



Here are a few boys that just want to have fun.



Remember, they don't mind hurting you.



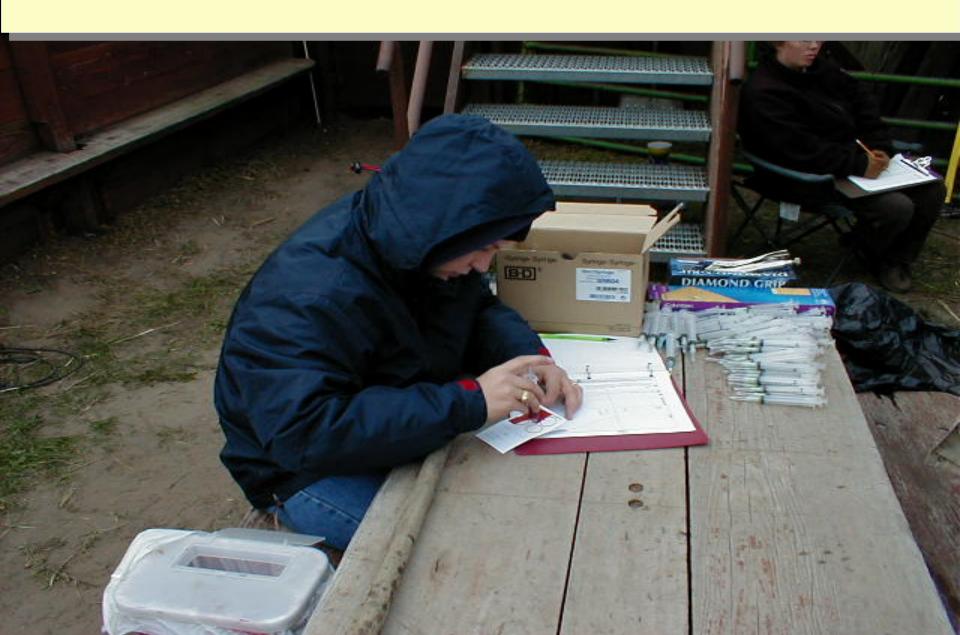
But, they really just want be friends..... Pet Me!!!!!



The calm before the storm.



Always include competent and hardworking graduate students to keep the books straight.



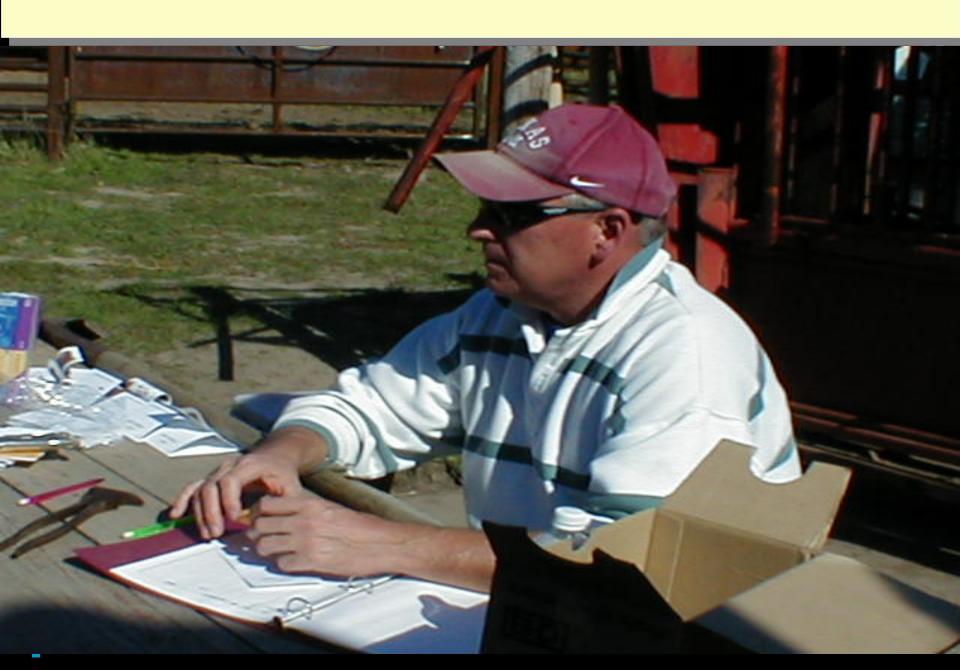
Make sure everyone has proper attire for the job.



Organize all of your DNA and data collection equipment in logical order. The action might be fast and furious later......



Are these bison or buffalo we are working today?



The stage is set.



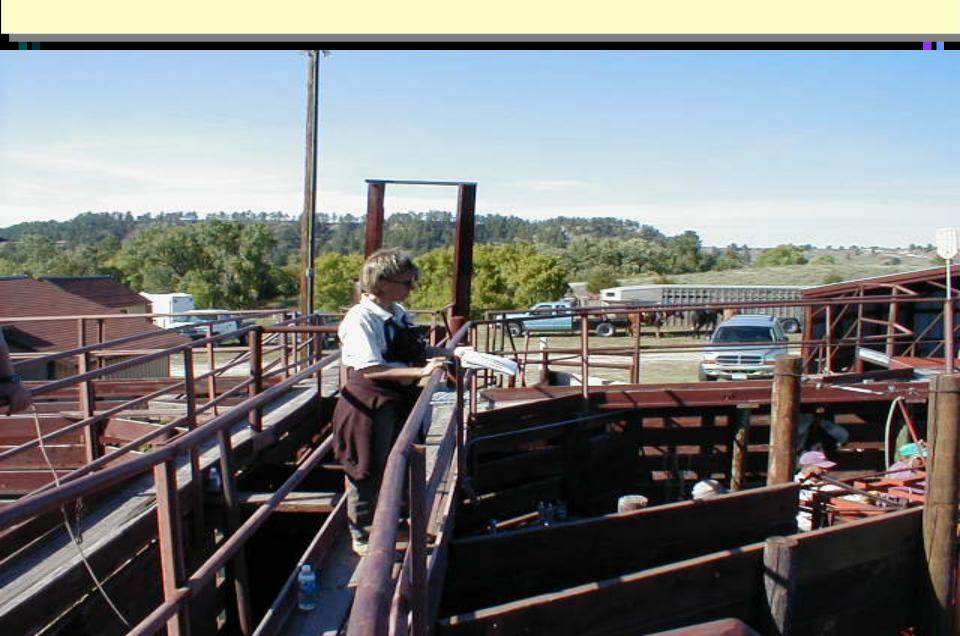
In addition to roasting buffalo steaks and mountain oysters, this Nebraska Barbecue Pit serves to heat the branding irons.



Hire good help, not just any wino off the street.



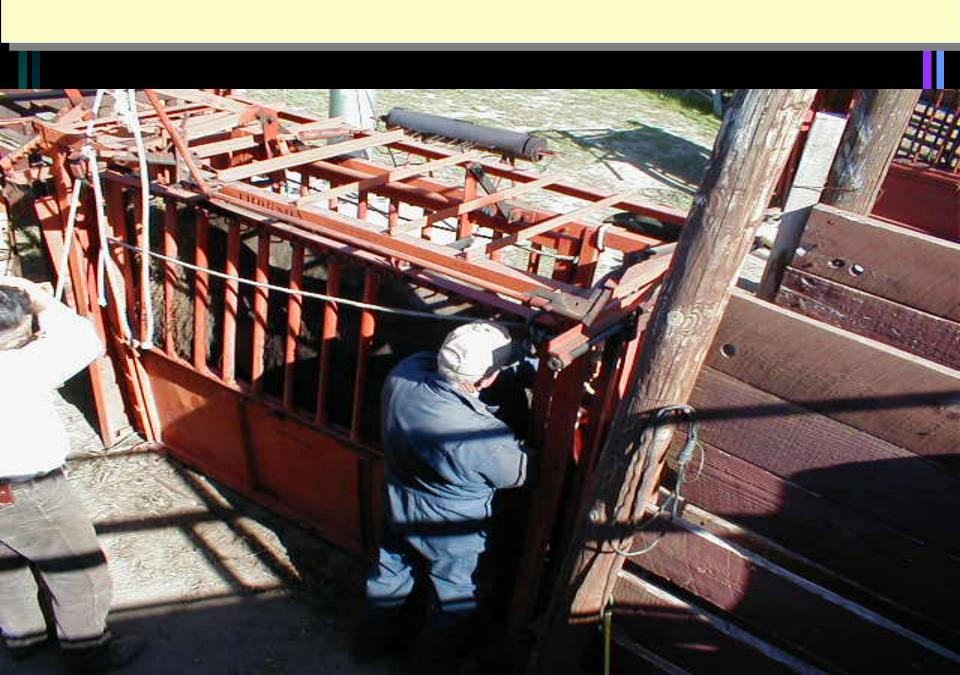
Make sure the "BIG SHOTS" from the refuge, park or private herd are in agreement with your procedures. Like Kathy McPeak at Ft. Niobrara NWR.



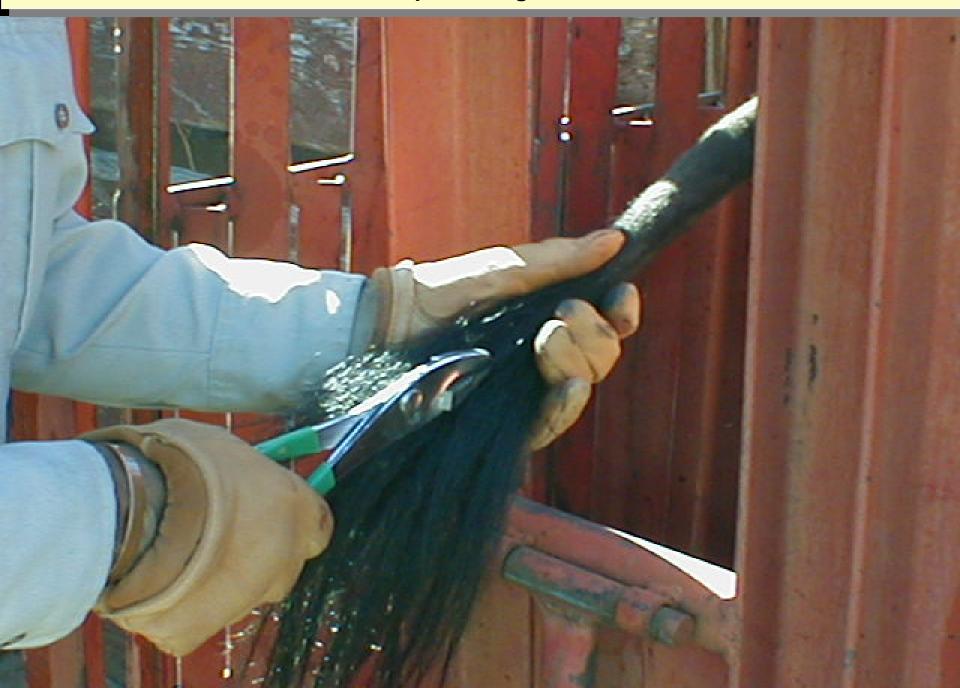
The first animal goes into the chute.



Have a good vet, like Dr. Coil here, a federal USDA vet. from Nebraska.



THE TAIL HAIRS. Grab the tail and pull straight out about 20 - 40 hairs.



Cut off the hair about 1 inch above the hair follicle. (Save the follicle end).



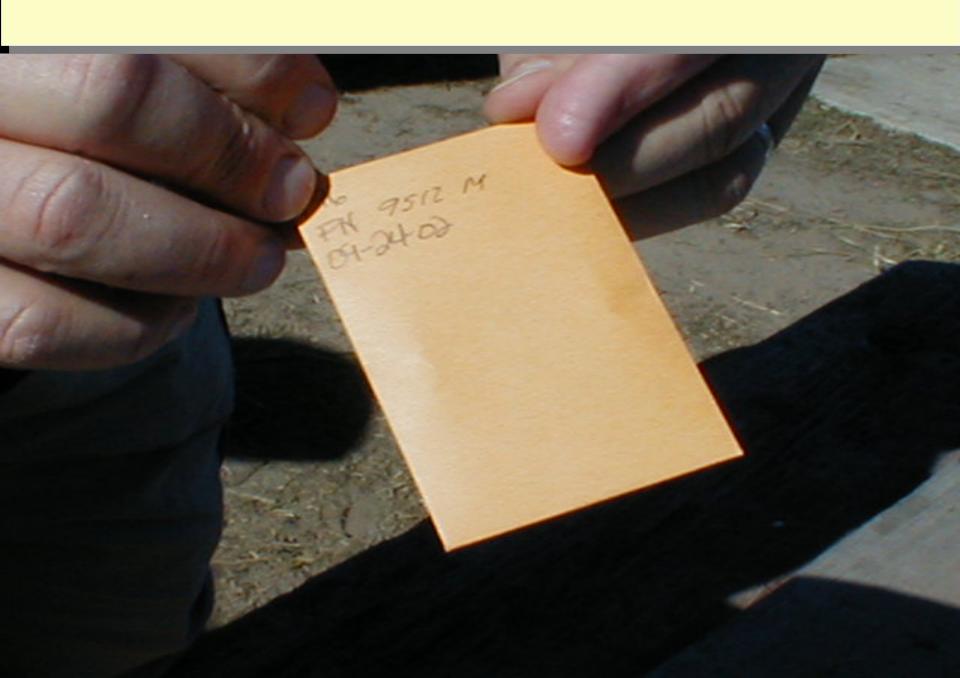
Make sure the hair follicles are still on the hairs.



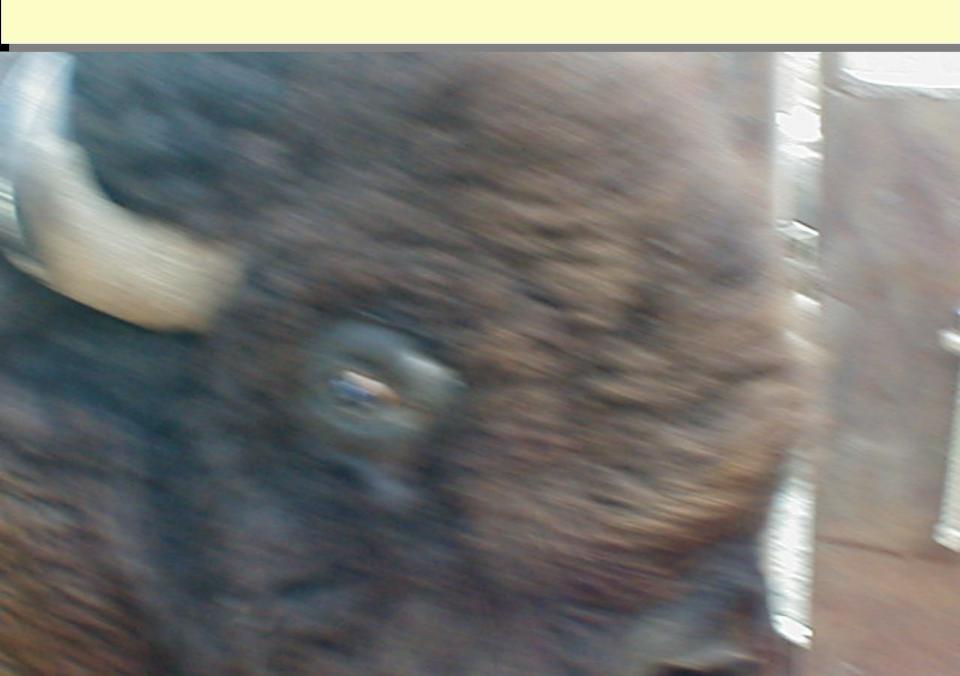
It's best to store hairs in a paper envelope.



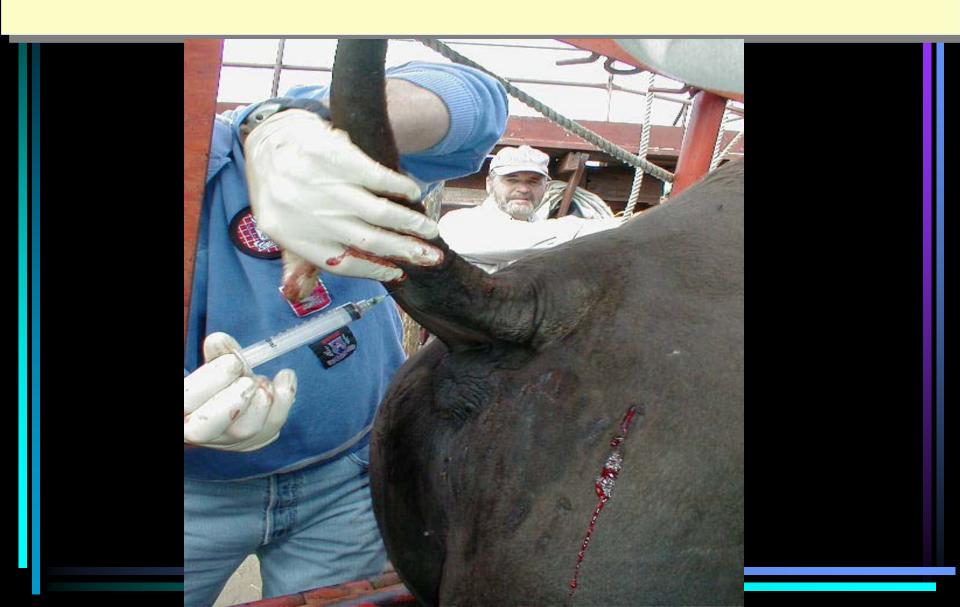
Always label with a pencil.....



Be sure to stay out of their face.....



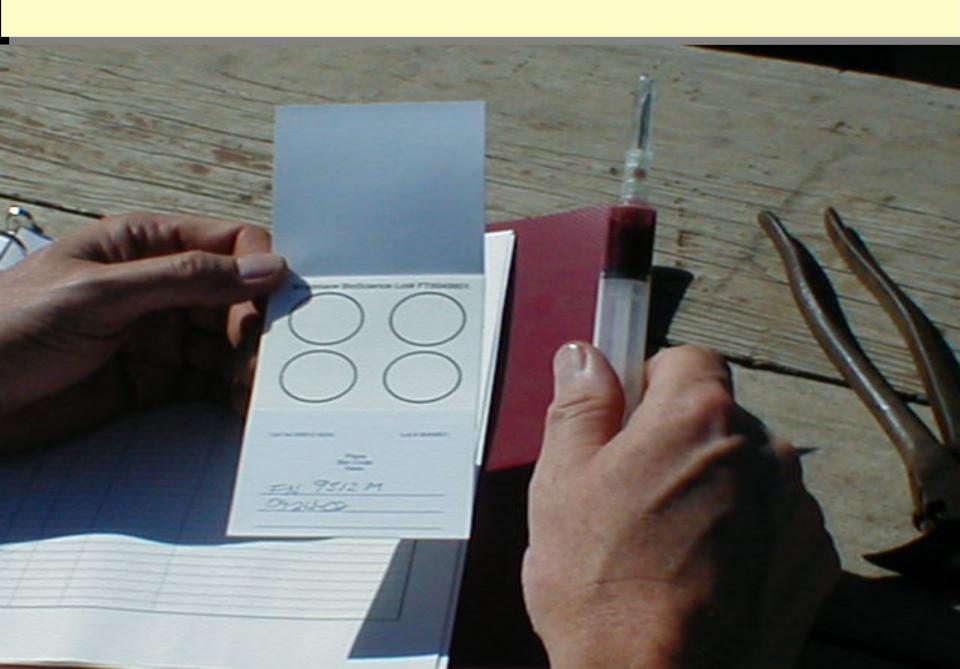
GETTING THE BLOOD. A tail stick with a 18 gauge needle is much safer for the workers that neck bleeding. However, sometimes on small animals you must neck bleed.



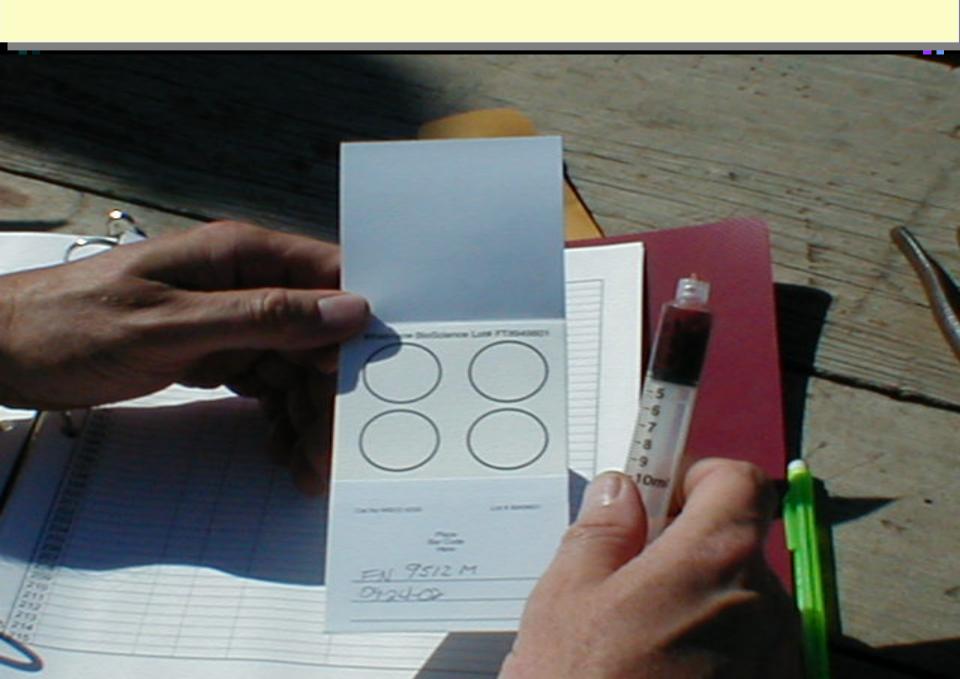
The DNA work requires about 2 MLs of whole blood.



Getting ready to apply blood to the blood card (FTA Whatman).



Remove the needle from the syringe.



Apply the blood with even strokes across the card. Less is better than too much. Optimally, we would like enough blood that you can see red through the back of the card, but not so much that it flows through.



Blood can be applied anywhere on the card. The circles serve only as a guide.



After the blood is on the card it MUST dry out completely before storage. Be sure the samples are clearly labeled in pencil & set the cards up "tee-pee" style to dry.



Be sure to turn them loose happy.....



Everybody will be tired after a long day......



A good roundup ends with no one getting hurt and great samples for genetic analysis.