



2016 Bison Roundup Report  
By Cody Considine

Nachusa Grasslands Bison Roundup October 18, 2016

This year we moved 86 animals through the corral in 3 ½ hours! This is a huge improvement from last year. We essentially processed twice as many animals in the same amount of time as we did last year. On average we were processing an animal every 2 ½ minutes. Some animals were only in the chute for as little as 30 seconds which is on par with veteran bison operations. The success of increased speed and efficiency can be directly contributed to the great team of volunteers and staff. We've worked very hard over the last several weeks to improve the corral on items we saw that needed attention during last year's roundup. The additional visual screens we built enabled us to move animals through faster, easier and with less stress. As with most operations at Nachusa we are always seeking to improve our program. A list of improvements can found at the end of this report.

All animals were vaccinated for mycoplasma bovis, Lepto, black leg, and heifer calves additionally received brucellosis vaccination. We decided to forgo pinkeye vaccinations due to the potential ineffectiveness of this particular vaccination being given in October and lack of being able to administer a booster during growing season. New subcutaneous ear chips and metal ear tags were implanted in the left ear of every animal. We switched from an old, outdated software program to Bison Pro that was developed for Turner Enterprises. Bison Pro allows us to easily track and manage animal and herd data over time. It has the technology that makes it both safer and faster to read the subcutaneous ear chip with a blue tooth wand.

Quick Summary of Nachusa Herd Structure as of October 18, 2016.

53 females

36 males (3 older bulls were not brought in for the 2016 roundup)

89 total animals (including 17 calves)

Average weight of calves: 350 lbs. Our largest calf weighed 420lbs.

# 2016 Roundup Roster and Assignments

**Roundup Leader** – Cody Considine

**PIB's (Person in Back- push animals up to alley)**

Dave Crites and Cody

**Alley Gates Operator - Crow's Nest**

Dave Lawson – Operator Gates 1-5

**Berlinic Cube Operators**

Wes Herwig – entry gates, animals coming into cube.

Damian Considine – exiting gates, animals leaving cube going into squeeze.

**Squeeze Chute / Head Gate**

Bill Kleiman

**New All Flex Ear Tags and metal ear tags**

Jeff Walk – implant new tags in every animal, scan with reader. Remove all collars.

Fran Harty - Attach new metal ear tags to every animal. Calves: 16XXX all other animals: 00XXX

**Old AVID Scanner / Protection gates**

Mike Carr – scan old tag on right side of ear and give number to Kirk and Jeff. Fail to scan – find metal tag on heifer. Ensuring protection gates are closed when animal released.

**Tail Hair**

Kaleb Baker- remove tail hair for parentage testing, place in one envelope, label sex, age, new ear ID number.

Remove hair for NIU study, place in envelop label sex and age new ID number.

**Data Recorder – Data Shed**

Jeff Cologna – operating Bison Pro inputting data.

Kelly Gutnecht – assisted with data input in Bison Pro.

Kirk Hallowell – Organized hair for DNA analyses.

**Outside Bison Influencer**

When instructed walk along outside of pens to put a little bit of pressure on bison to move forward.

Bernie – Tear drop and east side of cube

Dick Gambrel – Alley Pens and/or Cube near data shed

**Veterinarian**

Dr. Steve Baker with a technician

**Errands**

Crew – will be stationed at Holland House and bison viewing platform. Prevent people from walking or driving up to corral. Running errands if needed. Kaleb: **Bring coffee, snacks, and bottles of water in morning.**

**Photography**

Charles Larry

September 18 - Started conditioning animals with pasture cubes and a siren two times a week. The cubes are used as a tool to move bison. Bison are only given cubes 4 weeks out of the year before the roundup.



**October 9<sup>th</sup>** – Shut gate to South Unit. All bison in North Unit.

**October 16<sup>th</sup>** – Pulled bison with siren and cubes into the trap pasture.

**October 17<sup>th</sup>** – Pulled bison into trap alley and shut gates. Bison in trap alley and corral.

**October 18** – Day of Roundup.

7:30-11:15 Worked bison through the corral to receive vaccinations and new ear tags.

**October 19** – Opened release pasture gates

**October 20** – Opened South Bison Unit gate.

## Photos of the Day

All photos by Charles Larry

Morning briefing to fill up on coffee and go over flow of the day.



Dave Crites and Cody slowly move animals from trap alley into the corral.

Fran and Jeff watch as Dave Crites walks towards animals to move some through the corral.





Dave Lawson in the crow's nest opening and closing gates in the alley as animals are moving up into the Berlinic Cube. Thanks to Mike Carr for re-wiring our automatic gates. Controls are much easier to operate and maintain overtime.



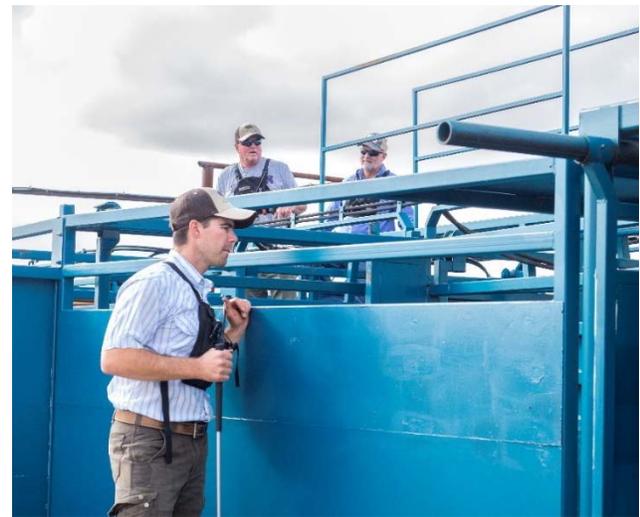
Dick and Bernie waiting for further instruction to help move animals through corral and into Berlinic Cube.

Damian and Wes in the Berlinic Cube sorting and moving animals up to squeeze chute.





Dave Crites helping move animals in Cube (L). Damian and Wes operating Cube while Cody ready to move an animal into squeeze chute.



Bill operating the squeeze chute with Mike Carr helping exit gate on corral. Average time for each animal in the chute was two and half minutes while some were processed under a minute.

Three-year-old bull “squeezed” in the chute so vet can safely administer vaccinations while others collect hair samples, scan and implant new ear tags.





Jeff Walk implanting the new subcutaneous ear chips.



Mike Carr scanning old ear chip to cross reference with new ear chips.

Fran Harty putting a metal ear tag on calf. IL Department of Agriculture requires each animal to have an additional identification tag besides the microchip.



Veterinarian, Steve Baker, gives the hand signal indicating he's done. Dr. Baker enjoys working with us and the bison especially since we have one of the best facilities around.



One thing is certain during a roundup: **something will break.** We have an amazing crew of bison handlers (mostly volunteers) like Dave Crites who have the skills to jump in and fix the problem.

A significant aspect of the operation is the data collection. Kirk Hallowell organized all the hair samples while Kelly Gutnecht assisted Jeff as he inputted all the data into the new Bison Pro program. On each animal we record sex, age, weight, weight date, all vaccinations given, special notes or injuries on animal if any. This information is stored under the animal's unique 15-digit number (ear chip). The ear chip is scanned by a blue-tooth wand which pulls up the animal's health record in the computer. Then new information is recorded before the animal is released.





Bison cow running toward her calf (background) after being released from the squeeze chute.

Stewards watching the roundup nearby from a safe place.



Our amazing crew of Sara Vaughan, Shannon Hankin, Katie McBride, Jessica Flinginger (not pictured) and Phil Nagorny (not pictured) led by Kaleb Baker were all instrumental in helping finish the improvements before the roundup.

**2016 Roundup Improvement Notes**  
**October 18, 2016**

These are notes collected during the after action review for the 2016 Roundup:

1. The locking mechanism on the head gate failed due to metal bending. A longer bolt was inserted which fixed the problem for this year. Recommendation that a picture of the problem should be sent to Zane as a potential design weakness. A suggestion was made that hardened steel might be used to reinforce this weak point in the squeeze chute.
2. The new positions and assignments worked extremely well. All volunteers responded to new assignments and moving animals worked well.
3. One animal slipped while leaving the squeeze chute. Recommendation that the squeeze chute exit be fully covered by rubber matting.
4. The latches on Gate 5 and Gate 2 need to have stops welded on latch post where top of gate hits.
5. Double gates in the trap pasture and in the neck need to have stops or some other reinforcing mechanism placed on them. Double gates on the trap pasture were stretched by bison putting pressure on them the night before the Roundup.
6. A mirror would facilitate visibility of the squeeze chute operator to the backside of the squeeze chute. Some discussion about the best place to put the mirror and a concern about the mirror being visible to bison was expressed.
7. A comment was made: calves staying with cows while moving through the chute worked very well.
8. Consider darkening the squeeze chute at the top either by painting the top of the squeeze chute black or by covering the top of the squeeze chute with a conveyor belt. Animals appeared to jump up as they entered the end of the squeeze chute possibly motivated by seeing light.
9. A few close calls at the beginning of the day based on communication - Dave was not clear that gates were not latched by Bill. Recommendation that close radio contact be maintained by all people operating gates before and during the Roundup.
10. Three people operating in the data shed was useful. It was helpful to have one person dedicated to backing up all of the data in hard copy. One person should be dedicated to taking hair samples in the data shed while one person takes the hair samples.
11. The additional visual blocks on both sides of the squeeze chute were very effective in limiting animals' tendency to balk.
12. Extremely useful to have Dick and Bernie available to move animals outside of corral.
13. Tools should be loaded out of trucks at the beginning of the day. Some tools were not available because the trucks were sent on errands. Tools to be sure that we have on hand include breaker bar, small and large sledgehammers, large crescent wrench.
14. Suggestion that hydraulic reducers be applied to pen gates one and two to decrease speed of gate closure. Alley gate number one may need less restriction. Dick Gambrel also has idea of special cylinder that automatically slows as piston/shaft reaches end points.
15. Have a radio for visitor trailer stand so they can hear some of the commands?
16. Jeff Cologna look into technology to have a live video feed at Holland House. Multiple cameras for stewards and visitors to see action without being close to corral. Can't have visitor trailer

parked near corral when we start to sell animals. Need pens on east side of corral for holding sell animals. Trailer would stress these animals.

17. Hay bale in corral helped lower stress of animals waiting to be processed. Gave some animals something to do, especially big bulls. Could have one or two more.
18. Add one or two more hydraulic gates that can be operated by someone. Would help with sorting animals in corral. Very safe. Eliminate close calls.
19. Get estimate for roof over cube and squeeze chute. Safety during rain, less slipping by handlers, eliminates baulking due to shadows created by the sun, helps maintain expensive squeeze and cube from exposure to elements.
20. Animals slipping in cube, some landed hard on concrete. Install rubber mats for traction? Install rubber mat in ready chute.
21. Put up visual barrier screen fabric next to vet on south side of pen so animals in east pens can't see vet.
22. 2017 culling animals. Should install a platform for Mike Carr to sit up and out of the way to open pen gates? Similar to Broken Kettle.
23. Dedicated step stool or small cat walk installed on corral tear drop to encourage animals to move into Cube from tear drop. Bernie and Dick.
24. Mirror for Damian to see if Ready chute has an animal in it. Careful placement to not creating baulking situation.

#### Action items:

1. Send picture of head gate problem to Zane for recommendation. Seek permanent solution to locking mechanism issue.
2. Order rubber matting for squeeze chute exit and ready chute before entering in cube. Possibly rubber matting or other material in cube.
3. Install gate stops on gates two and five.
4. Install sleeve with removable post reinforce trap pasture gates and neck gates.
5. Darken top of head gate or cover top of head gate with rubber conveyor belt material.
6. Determine if mirror for squeeze chute operator would be helpful or a distraction.
7. Be sure all people working gates and cubing animals have radio communication.