Cattle Health Management & Vaccination Plans

First Nations Knowledge Webinar Series Supported by the Walmart Foundation

OCTOBER 14, 2015
Thank you for joining the webinar. While we are waiting for the webinar to begin, we request that you mute your phones to avoid background noise and distraction noise and distractions for all participants. Phones will be muted on our end as well. Thank you!
Announcements:

- All attendees are on mute
- Questions:
  - Listen: Type in Question box and we will read
  - Q/A also at end of presentation
- Recording and attachments can be downloaded from www.firstnations.org/fnk next week.
Future Webinars:

- **Nonprofit Options for Native American Ranching Organizations**
  *Date:* January 13, 2016

- **Business Planning for Native American Ranchers**
  *Date:* March 16, 2016
Herd Health & Vaccinations
Herd Health Management Practices
Today’s Goal:

*Increase future dollars within your cattle operation using herd health management.*

**How do we get there?**

- Practice *good herd health* and *nutrition*.
- *Increase production* by getting *95% or better* calf crop.
- Genetics: *Increase quality*, not quantity.
- *Improve perception* of both media and general public.
Health Herd Management

Genetics/Animal Selection

Protocol Development/Biosecurity

Nutrition
**Expected Progeny Difference (EPD):**

Traits that aid in prediction of how the future progeny of each animal are expected to perform relative to the progeny of other animals listed in the database.
# Expected Progeny Difference (EPD)

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<th>WW Acc</th>
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<th>RADG Acc</th>
<th>DMI Acc</th>
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## Maternal (continued)

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## Production

- Birth Weight
- Calving Ease Direct
- Yearling Weight
- Weaning Weight
- Milk Production
Sire Traits to Improve Production

• Increased Performance
  – Yearling Weight (YW)
  – Residual Average Daily Gain (RADG)
  – Dollars Feedlot ($F)

• Increased Carcass Yield
  – Carcass Weight (CW)
  – Ribeye Area (RE)
  – Dollars Grid ($G)
  – Dollars Yield Grade ($YG)
  – Dollars Beef ($B)
Developing a Vaccination Program

- Production Cycle
- Geographic Location
- Management Practice
- Disease History of Cattle
- Feeding Practice
Vaccination Protocol: ADULTS

Replacement Heifers
• Leptospirosis, Vibriosis, IBR, BVDV, BRSV, P13
• Internal and External Parasite Control

Cows
• Leptospirosis, Vibriosis, IBR, BVDV, BRSV, P13
• Internal and External Parasite Control

Note: Examine teeth, udders, feet and eyes

Bulls
• Leptospirosis, Vibriosis, IBR, BVDV, BRSV, P13
• Internal and External Parasite Control
• Trichomoniasis (if needed)
Vaccination Protocol: CALVES

At Branding (1-3 months of age)
• 7-way Clostridial (at 3 months and 2-4 weeks later)

Pre-Weaning (Up to 10 days before weaning; allows immunity to develop)
• IBR, BVDV, BRSV, P13 Virus, HAEMONPHILUS Somnus, Pasteurella (Killed Vaccine)
• Internal Parasite Control (If needed)
• External Parasite Control

After Weaning (10 days to two weeks after weaning; allows immunity to develop)
• IBR, BVDV, BRSV, P13 Virus, HAEMONPHILUS Somnus, Pasteurella (Modified-Live)
BENEFITS OF VACCINATION
Benefits

• Improves overall health.
• Reduces & prevents disease.
• Improves reproduction.
Benefits

- Passes immunity to calves.
- Improves survival for weaning.
- Eliminates high dosage of antibiotics.
- Strengthens reputation of cattle brand.
Benefits

- Benefits for all cow-calf operators, owners of 1-1000 plus head.
- Concentrating on improvements for genetics, health, media-perception; quality, not quantity.

Example: Small Ranchers, Co-ops, Associations, Tribal Ranches, etc.
HOW CATTLE GET INFECTED
How Diseases Transmit

- Diseases can transmit through three organisms:

  - Viruses
  - Bacteria
  - Parasites
What is a Virus?

- A virus is a microorganism that can’t grow or reproduce apart from a host cell.
- Viruses can enter through the nose, mouth or broken skin.
- Viruses can attack cells making more viruses.
What is a Bacteria?

- Bacteria is a group of single-celled organisms living in all environments.
- Not all bacteria cause disease.
- Pathogenic bacteria can cause disease by attacking cells or producing toxins.
What Are Parasites?

• A parasite is an organism that needs to live on or in other organisms to survive.

• Internal parasites can cause serious disease and death.
What Are Parasites?

- External parasites can cause skin damage and can pass diseases between animals.

Tick | Lice | Mites
Duration of Activity

(Life-cycle of Strongyle Nematodes)

- Adults mature in gut and produce eggs
- Eggs are released in feces
- Cows and calves ingest juveniles while grazing
- Juveniles hatch in fecal pat and live in soil
- Juveniles crawl up on blades of grass

3-6 wks

90% parasites on pasture; 10% a in your cattle.
VACCINES & PARASITE TREATMENTS
How Vaccines Work

• A substance used to build immunity against infectious organisms.

• Stimulates the immune system to produce protective response.
Vaccines

Modified-Live
Killed
Booster
Parasite Treatments

Wormers
Pour Ons
HANDLING & APPLICATION
Types of Injections

- Subcutaneous
- Intramuscular
- Intranasal

Give subcutaneous & Intramuscular injections in the neck. Avoid injecting into the top butt or rump.
Vaccine Injections

• Follow manufacturer instructions for handling and storage.

• Keep needles and syringes clean.

• Do not use disinfectants to clean needles and syringes.

• Do not mix different vaccines together.
Vaccine Injections

• When using a vaccination gun:
  
  - Never use disinfectants to clean. Instead use boiling water to clean.
  
  - Allow it to air dry, then lubricate the plunger with glycerin or cooking oil.
  
  - Place a loaded syringe into a ice-filled cooler.
Injection Techniques

• Ensure the animal is securely restrained.
• Use the correct needle.
• Correctly fill the syringe.
• Select the best route of administration.
Parasite Prevention

• Follow preventative methods:
  - Check and treat new cattle before adding them to existing herds.
  - Maintain proper sanitary conditions to reduce breeding.
  - Conduct pasture rotations.
Parasite Treatment

- There are several application methods when treatment is needed.
- Read and follow all recommendations.
- Do not treat animals that are sick or stressed.
- Do not use around feeding areas or water troughs.
- Record every application given.
DOCUMENTING VACCINES
Myth: “My calves do not get sick when they get to the feedlot.”

Bovine respiratory disease (BRD) costs the beef industry an estimated $1B annually due to economic losses from death, reduced feed efficiency and treatment costs.\(^1\)\(^2\)

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Myth: “There is not benefit for the seller to prepare their calves for the feedlot.”

<table>
<thead>
<tr>
<th>For the Calf</th>
<th>For the Buyer</th>
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<tbody>
<tr>
<td>• Improved immuno-competence</td>
<td>• Rapid feedlot adaptability</td>
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<td>• Improved disease resistance</td>
<td>• Improved feed efficiency</td>
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<td>• Improved health</td>
<td>• Improved carcass quality</td>
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<td>• Welfare</td>
<td>• Reduced treatment cost</td>
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<tr>
<td>• Improved feed efficiency and rate of gain</td>
<td>• Reduced death loss profitability</td>
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</table>
Myth: “There is no benefit for the seller to prepare their calves for the feedlot.”

- Responsible land stewardship.
  - Reach the optimum.
- Ensure that calves have the opportunity to fulfill their genetic potential
- Attain status as a select supplier.
- Increased profitability potential.
RECORD KEEPING
Record Keeping

• Keeping a vaccination history is important to good herd management.

• Advantage when selling cattle, especially when part of an aged and sourced-verified program.
## Vaccination Records

- **Date:** 2/11/2015
- **Cattle Lot Number:** A-1
- **Number of Head:** 25

**Facilitator's Name:** Karen Begay

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Record Keeping

• Protects against potential liability.

• Cattlemax allows you to easily manage records for all the herd.
Cattle Management Timeline

NAB Cattle Management Plan
Padres Mesa Ranch

- **JANUARY**
  - Turn Bulls

- **FEBRUARY**
  - Turn Out Bulls

- **MARCH**
  - Purchase Bull Bulls

- **APRIL**
  - Breeding
  - Artificial Insemination (AI) bulls

- **MAY**
  - Calves and Nursing
  - Vaccination: 1st
  - Ironing
  - Bay Oil

- **JUNE**
  - Calves and Nursing
  - Vaccination: 2nd
  - Ironing
  - Bay Oil

- **JULY**
  - Calves and Nursing
  - Vaccination: 3rd
  - Ironing
  - Bay Oil

- **AUGUST**
  - Calves and Nursing
  - Vaccination: 4th
  - Ironing
  - Bay Oil

- **SEPTEMBER**
  - Calves and Nursing
  - Vaccination: 5th
  - Ironing
  - Bay Oil

- **OCTOBER**
  - Calves and Nursing
  - Vaccination: 6th
  - Ironing
  - Bay Oil

- **NOVEMBER**
  - Calves and Nursing
  - Vaccination: 7th
  - Ironing
  - Bay Oil

- **DECEMBER**
  - Calves and Nursing
  - Vaccination: 8th
  - Ironing
  - Bay Oil

- **Pre-Conditioning**
  - Backgrounding
  - 30 - 45 Days

- **Sell**

- **Pre-Weaning:**
  - 1. Super Poly Boc 3 x 156A + EID 2x: 60 days
  - 2. Wean: 90 days
  - 3. Age: 150 days

- **Forest White Body**
  - 10 Days

- **Breeding, Cervical, Bar Tap, Dehorning & Vaccination:**
  - Vaccination 7 antigens (Back Leg, 2x: 60 days
  - Implant: Tegata / Ovap

- **Catching Season:**
  - 350 Days, average gestation period of cow

Labata Feed Service
Questions
**CattleMax** – pricing based on the number of active animals you manage and is available in three different editions that are based on active animals.

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Calf Vaccination Time Line

- **Test Bulls**
  - Purchase/Lease Bulls

- **Turn Bulls Out**
  - Breeding Season

- **Deworm Cows and Bulls**
  - 1) Ivermax 12 to 15 cc; SQ
  - 2) Brute; Pour On

- **AI (Artificial Insemination) Cows**

- **Deworm Bulls**
  - 1) Ivermax 12 to 15 cc; SQ
  - 2) Brute; Pour On

- **Vaccinate Cows**
  - 1) Vira-Shield 6+ VL5, 5 cc; SQ
  - 2) Ivermax 12 to 15 cc; SQ
  - 3) Brute; Pour On

- **Brand Cattle**
  - Castrations, Ear Tagging, De-horn, Vaccination
    - 1) Vision 7 w/Spur (Black Leg) 2cc; SQ
    - 2) Implant, Ralgro; 1 dose

- **Fence Wean**

- **Pre-Wean Shots**
  - 1) Super Poly Bac B + IBRK + BVDk, 2cc; SQ
  - 2) Ivermax, 5cc; SQ
  - 3) Brute, Pour On

- **Pre-conditioning**
  - Modified Live Vaccine - 10 days after weaning Starts
    - 1) Bovi-shield Gold 5, 2 cc; SQ
    - 2) Age - Source Tags

- **Gain GRoss**
  - 100 lbs
  - 200 lbs
  - 300 lbs
  - 400 lbs
  - 500 lbs
  - 600 lbs

- **First Calves Expected**
  - 283 days, average gestation period of a Cow

- **Calving Season**
* Keep accurate records. The guy at the auction is not going to just take your word that you vaccinated your calves."

* Give injections in the neck, not the hip. That way you don't risk spoiling the premium meat, and your calves will command a higher price.

* Slowly switch your herd over to black Angus. We're talking the same age calves, raised the same. The Angus just naturally put on more weight.

* Reduce your herd to a manageable size. It's better to have 10 well-fed, healthy cows than 20 you can't take care of.

* Get spreadsheet software for your computer and learn how to use it.

* Adjust your corral gate latches so you don't have to dismount to open and close them. Not only will it save time, but studies have shown cows are less distressed by a man on horseback than by one on foot.
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