



## Driving Beef and Forage Innovation Right Here at Home

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Manitoba Agriculture  
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# MBFI: Who are we?

- Manitoba Beef & Forage Initiatives Inc. (MBFI) is a collaborative research and demonstration farm
- Four core partners:

**Manitoba Agriculture**

**Manitoba Forage and Grassland Association (MFGA)**

**Manitoba Beef Producers (MBP)**

**Ducks Unlimited Canada (DU)**



# MBFI: OUR Opportunity

- Recognize the growing support for forage & beef research /extension.
- Encourage/support dialogue within the industry, to fine tune priorities, to fill the gaps in knowledge and adoption.
  - Continue consultations with producers, academia, provincial extension staff .
  - Aligned with the BCRC National beef research strategy.
- Create a hands-on opportunity to learn



# MBFI: Public/Private Partnership

- Supporting collaboration across organizations.
- Government and industry working together to promote foundational and applied research to producers, students and the public.



# Mission and Vision

- **MBFI is a centre of agricultural innovation engaging in science-based research to benefit valuable ecosystems, improve producer profitability and build social awareness around the beef and forage industry.**
- **We want a World-leading, prosperous and vibrant beef and forage industry in Manitoba.**



# MBFI: Industry Directed

- Board of Directors: comprised of members from the four partners.
- Steering Committee comprised of members from the four partners.
- Research Advisory Committee
  - Provide vision/advice on MBFI direction,
  - Membership: producers (early adopters), government, university, and associations (MB Ag, AAFC, MBP, DU, WBDC, MFGA, U of M).
  - Research Fund (MBFI administered),



# Dual Purpose

- Push the limit:
  - ‘look outside the box’*
  - ‘try the impossible’*
  - ‘attempt risky projects’*
  - ‘keep projects diverse’*
  - ‘be on the leading edge’*
- While continuing to manage the basic things that keep us farming:
  - Enterprise management,
  - Maximizing land use,
  - Recording input and outputs,
  - Owning vs renting.



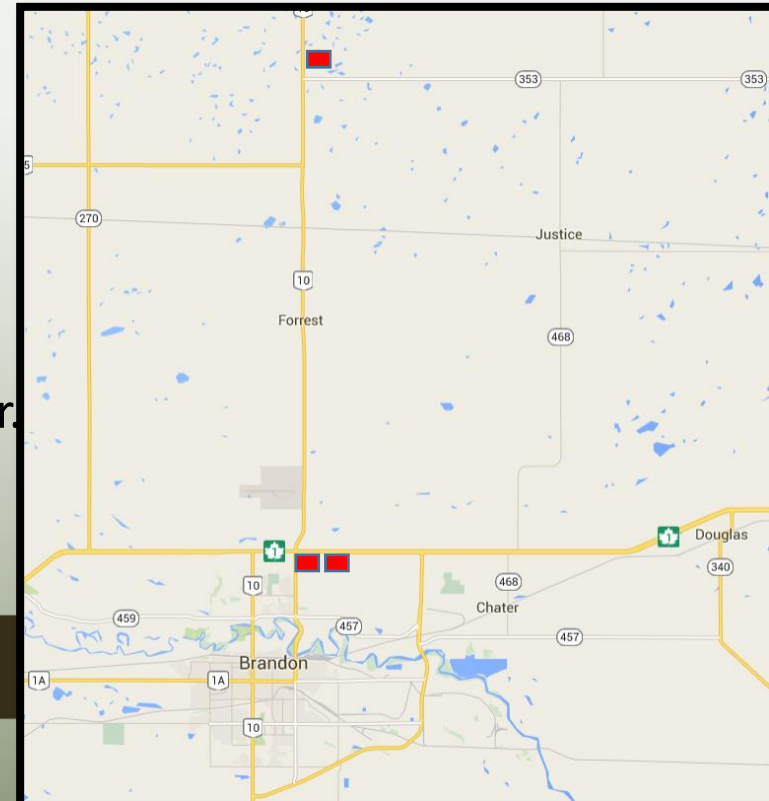
# MBFI Objectives

1. A formalized structure of communication and collaboration between stakeholders of the beef and forage sectors – two-way.
2. An active beef and forage research program in Western Manitoba - that also expands beyond our borders and invites other forage and beef research providers to the province.
3. A demonstration farm that challenges conventional wisdom, with a purpose to improve adoption rates, and to teach the next generation.
4. An informed dialogue between industry and policy makers, media, and general public.
5. A platform to increase Canada's professional capacity in livestock and forage research and extension.



# Where are we located?

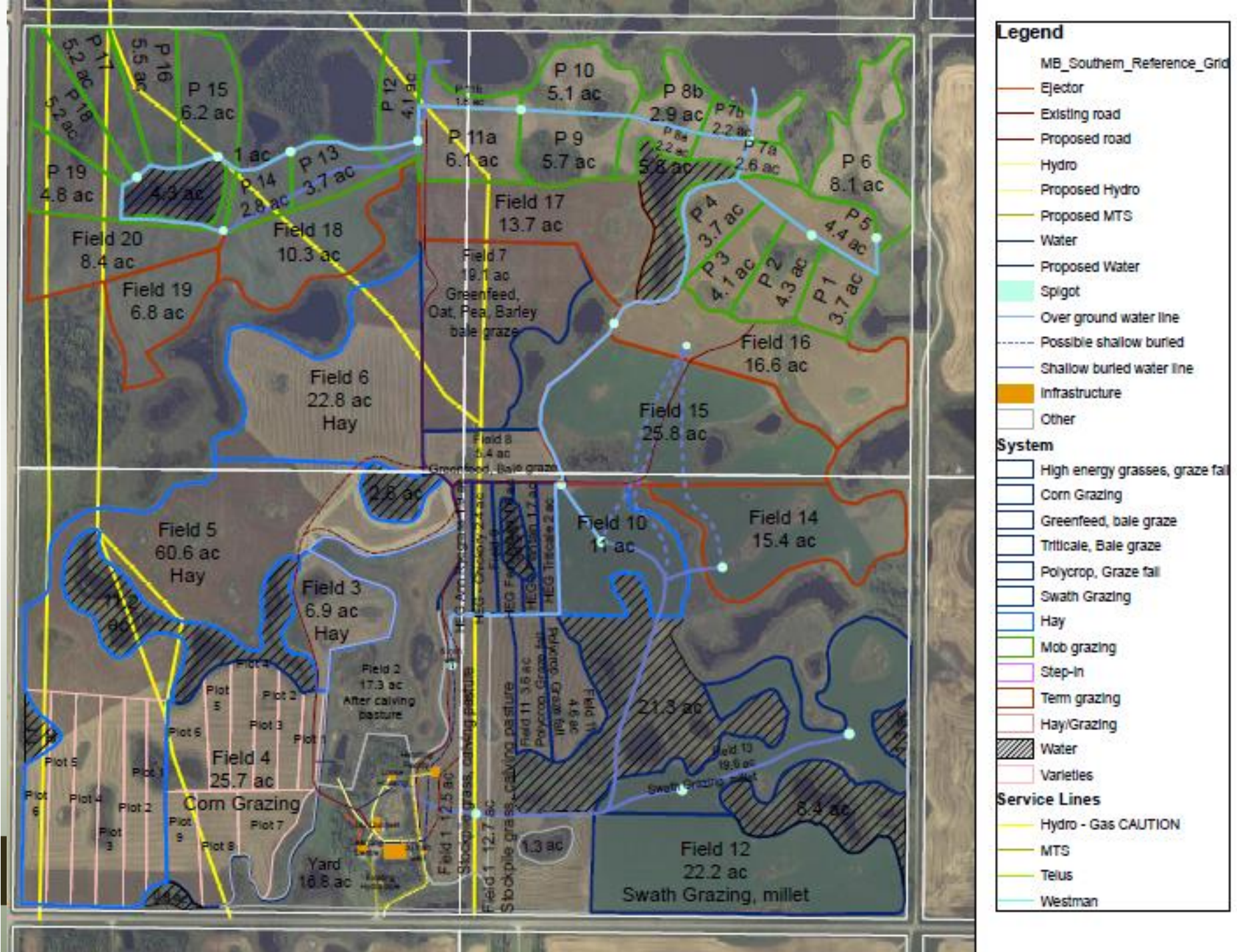
- *3 distinct environments for flexibility.*
- **Brookdale Farm:** 10 minutes north of Brandon.
  - Classroom + Cattle handling facility provide indoor/outdoor teaching environment.
  - Year-round grazing, low-cost winter feeding, animal handling and care, environmental interface.
- **First Street Pasture:** 1 mile east of Brandon.
  - Open range, rotational grazing, spurge control.
- **Johnson Farm:** 1 mile east of Brandon.
  - Cattle handling facility, mobile lab, replicated pastures, year-round water.





- 640ac

- Status
  - Ag Capability Class 2-5
  - Variable Landscape
  - Riparian zones
  - Brush
  - Wildlife
  - Eroded knolls
- 
- Opportunities
  - Crop/Livestock integration
  - Year round grazing
  - Annual/Perennial rotations
  - Flood mitigation





## First Street Pasture

•440 ac

## Johnson Farm

•480 ac



# What are we working on?

- Design/set up
- Acquiring equipment and cattle
- Initiating applied research projects.
- Extension and Outreach.





Scale Shed / Lab



Replicated Winter Grazing Site  
Fencing: 15 miles



Pasture Water Lines: 5+ miles



Solar Powered Winter  
Water Systems



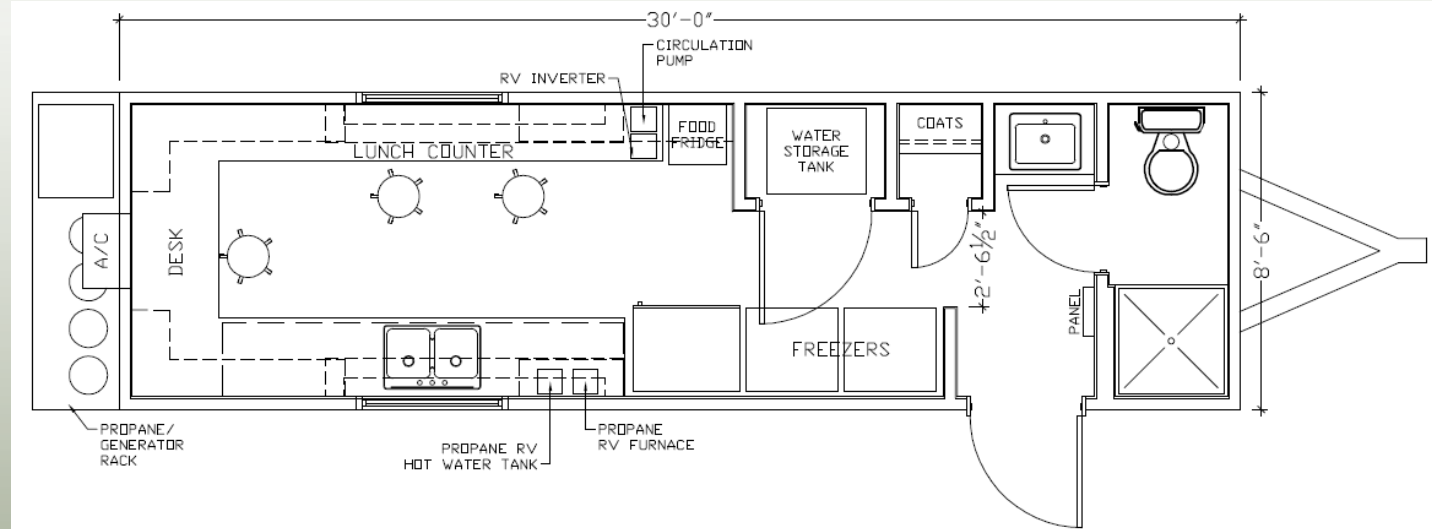
Cattle Handling Training Center



Field Classroom / Farm Storage

# Mobile Laboratory

- Build research capacity
- Process and storage samples
- For use on/off farm
- Year-round capability



# Learning Center

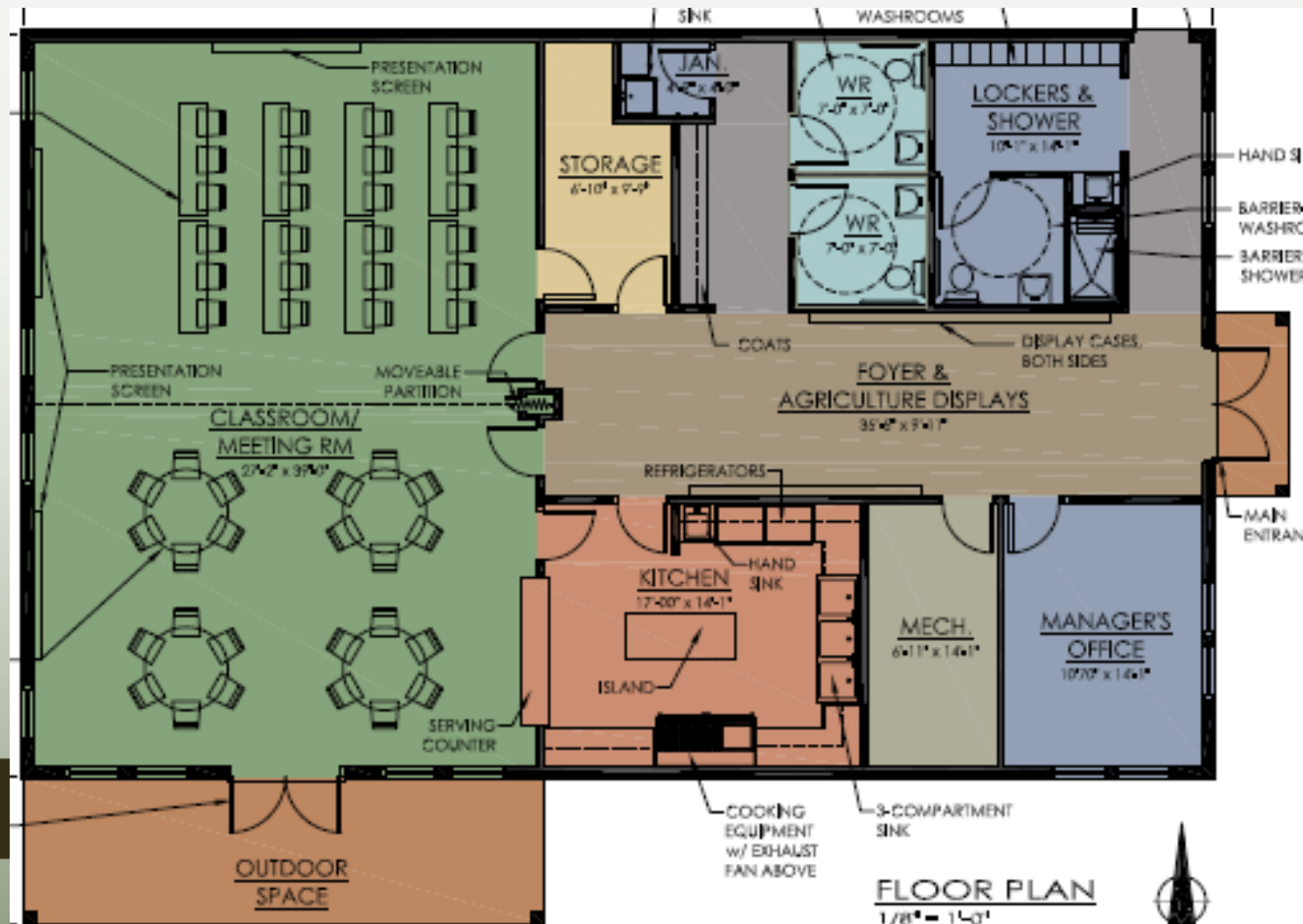


Outdoor Learning Area



Residences

- Existing steel round grain bins converted into residences.



# Projects

- 22 current/on going projects at the 3 MBFI sites
  - 13 applied research projects are led by Manitoba Agriculture and/or AAFC
  - 9 projects led by researchers (AAFC, University of Manitoba, University of Winnipeg, Brandon University)
    - Some projects are stacked together
- Production goal: year-round grazing



# Projects

- Grazing

1. **Planned Grazing** Comparison
2. **Polycrops** for late season grazing
3. **Energy Dense** Annual Forages
4. **Introducing legumes** using sod, broadcast/mob, grazing
5. Teaching Cattle to **Eat Leafy Spurge**
6. Using simple rotational grazing to improve pasture production
7. Impact of cow-calf feeding and vaccination strategies on carcass outcomes in beef cattle
8. Forage species evaluation for overwintered cows
9. Impacts of cattle **grazing on foxtail barley** in wet meadow rangeland communities
10. **Extended Grazing** & Extensive Wintering Project

- Soil, Ecology and/or Environment

1. **Riparian Health** Assessment of Wetlands
2. Burrowing **Rodent Thresholds** in a Forage Crop
3. **Shelterbelt designs** for improved extensive grazing systems and biodiversity
4. Impacts grazing intensities on **Cicer milkvetch** abundance on a planted native grass pasture
5. **Soil Carbon** monitoring to detect changes in soil carbon due to implementation of planned grazing and rotational grazing
6. **Alfalfa Phosphorus** Ramp Demonstration
7. Influence of landscape position and forage management practices on **soil health**
8. Response of rangeland ecosystems to extreme drought
9. Experimental evaluation of microbial biomass as an indicator of soil health under forage management
10. Use of polycrop mixes to promote soil microbial communities and improve forage yield and sustainability
11. An economical management option for fighting leafy spurge
12. **Edge of Field Runoff** Project



# Looking Forward: Extension and Outreach

- Our most important piece.
- Adoption succeeds through 5-step process:
  1. **Awareness** – learning of the new idea (but having few details about it)
  2. **Interest** – developing an interest about the idea, seeking more info
  3. **Evaluation** – turning general interest into personal interest
    1. e.g. mentally applying the innovation to one's own situation
  4. **Trial** – physically applying the innovation, usually on a small scale
  5. **Adoption**



# Looking Forward

## Engaging the Next Generation

- Student workshops
  - Field trips, workshops, hands-on learning
- 4H Canada
  - Short term projects, training sessions, develop interest in agriculture.
- Ag In The Classroom
  - Open farm days, field demonstrations, engage the general public.



# Looking Forward

## Friends of MBFI

- Partnership development is on-going.
  - Significant support from local retailers
- Feb 2016: McDonald's Canada
  - MBFI core values align with McDonald's and the Canadian Roundtable for Sustainable Beef (CRSB).
- 2016/2017: additional partners to be announced this winter.



Please join us for....

Extended Grazing Workshop – December 8, 2016

Grand Opening - Summer 2017

[www.mbf.ca](http://www.mbf.ca)

Twitter: @MBBeefandForage

FB: Manitoba Beef & Forage Initiatives Inc.



# Thank you to our Core Partners and Major Funders

