

HIGH LEGUME PASTURES

Creating profit above ground and wealth below.

2016/2017

High Legume Pastures...

- increase calf and yearling weight gains or cow body condition scores.
- extend pasture productivity beyond the “summer slump” of tame grasses.
- fix nitrogen to reduce fertilizer costs and increase forage production and profit.
- provide root systems to different profiles in the soil, therefore increasing utilization of soil moisture and increasing carbon capture depths.
- are more drought averse.

AAC Mountainview Sainfoin...

- is a no-bloat legume containing tannins that can greatly reduce the risk of bloat from alfalfa when in a mixed stand.
- was developed by Dr. Surya Acharya, Agriculture and Agri-Food Canada, Lethbridge.
- has a similar growth and regrowth pattern to alfalfa.
- competes with alfalfa, ensuring it stays in the pasture longer to provide bloat control.

Take away lesson from 2016 field days: **When establishing forages, seedbed preparation is key.** Ensure the seedbed is firm prior to seeding using harrow packers or equivalent.

“After close to thirty years working as a forage specialist, I don’t think I have ever seen a seedbed too firm prior to seeding a perennial forage stand. But you do need some loose dirt to cover the seed.” Lorne Klein, Saskatchewan Ministry of Agriculture



Sainfoin & Alfalfa Seedlings - Consort, AB

Goal was 60% legume establishment in the pasture.

Ultimate Pasture Mix consists of 30% AAC Mountainview Sainfoin and 70% Haygrazer Alfalfa.

Remaining 40% grass/legume was choice of the producer.

In cooperation with ten forage and applied research associations, thirteen producers across Alberta, through the Agricultural Research and Extension Council of Alberta (ARECA), and in consultation with high legume grazing mentors with financial and economic analysis, Alberta Agriculture and Forestry (AF) staff are coordinating a two year field trial to demonstrate the potential of sainfoin in a high-legume pasture mix on field scale level.

2016 Summer Events

During the summer of 2016, ten events were co-hosted with project teams. In addition to hearing from cooperating producers and seeing the progress in the fields, grazers with many years of involvement in using higher legume pastures came to share their experiences and answer questions at each field day. These "Grazing Mentors" had provided multiple years of economic and financial data to the AgriProfit\$ program for analysis and could speak to not only their experience, but also how it affected their financial bottom line.

Site Establishment Update (Sept 2016)

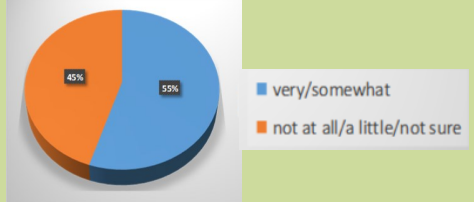
- 2 Rated 'Excellent'
- 2 Rated 'Okay'
- 5 Rated 'Fair**'
- 2 Rated 'Poor**'

**** forage stand touch-up happened in one stand in fall 2016. Other stands will be touched-up Spring 2017.**

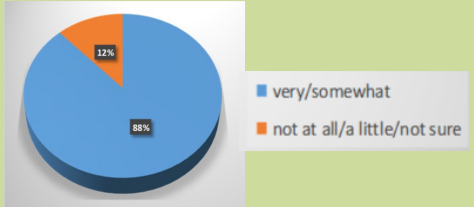
33% of attendees gained confidence in establishing a high legume pasture in their operations.



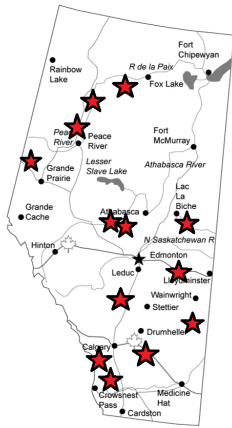
Field day participants were provided a questionnaire at the start of the day asking how confident they were about grazing high legume pastures. Below is a summary:



After the field day an evaluation was provided and participants were asked how confident they were about grazing high legume pastures. Below is the summary



Stand Establishment Forage Plant Count:
Excellent = 6+ forage plants/ft2
Okay = 3-5 forage plants/ft2
Fair = 2 forage plants/ft2
Poor is less than 1 forage plant/ft2



Province-wide Project

- FPGA: Longview
- FPGA: Gleichen
- MARA: Fort Vermilion
- MARA: Buffalo Head Prairie
- GRO: Fort Assiniboine
- WCFA: Barrhead
- GWFA: Lacombe
- LARA: Iron River
- CARA: Consort
- PCBFA: Fourth Creek
- BRRG: Holden
- NPARA: Manning
- FS: Granum



Sheep grazing the newly established site at Stein's (West Central Forage Association) November 2016. The stand establishment is rated as excellent. No sheep bloated.

Watch for more on establishment, and look forward to grazing stories in 2017!

50% attended the field days because they heard about it through their local forage/research association. We are working in the right circles to effectively extend this information.



Foothills Forage & Grazing Association Field Day August 24, 2016



67% of cow-calf owners attending had less than 100 cows.



80% of attendees were very satisfied with the event and no one was dissatisfied.