

R & D Report: Project Updates

by Julie Robinson & Sandra Burton

Interseeding to Improve Forages

Year: 2 of 3 years **IN PROGRESS**

Project Lead: Julie Robinson, Forage Friendly Enterprises

Director Leads: Kristina Schweitzer

Funding Partners: Peace Region Forage Seed Association, South Peace Grain, Investment Agriculture Foundation of BC, Shell Canada, Agroworks / Trevor O'Dwyer.

Details: The objectives of this project are to:

1. demonstrate if forage quality can be improved by seeding into existing stands by exploring which species of legumes & grasses have the greatest potential for success in interseeding.
2. demonstrate if forage yield/ carrying capacity can be improved by seeding into an existing stand by exploring species & timing of seeding.
3. determine if the new forage drill can be utilized to seed into existing forage stands & if management practices can be utilized to improve the success of interseeding such as intensive grazing, or herbicide use.
4. develop extension material, knowledge and knowledgeable resource people to provide strategic support to delivering on farm climate adaptation practices & improve & enhance forage networks to enable a more resilient forage industry into the future.

Cooperators & Sites:

- 2018 Fall Seeding: Shell Canada, km 11 on Sanataa Road (Braden Road)
- 2019 spring Seeding: Mickey Zunti, urdale (North of Fort St John)
- 2020: Armstong Rolla, ODwyer Rolla, Wilson Bonazna, Fossum/Frost East of Dawson Creek

Progress to Date:

2019 Season:

Zunti: Murdale showing 10 conventional rejuvenation plots compared to 15 species trials of interseeding.

Sunset Community Pasture with Shell Canada: crown grazing 11 km off the Braden Road on the Sanataa. Seeding 5 different mixes to out compete foxtail barley.



Foxtail Plot visit in Sunset Community Pasture. Notice the absence of foxtail in the enclosed area we are standing in left to right Aaron Mackay, Jim Chramosta, Peter Zingre, & Julie Robinson.

2020 Season:

Plots seeded:

Armstrong: Alfalfa/Brome blend interseeding into bare areas in 1 year old stand. Minimal success identified in the fall of 2020

Wilson: Species mixes interseeding into thin stand greater than 15 years old, lots of bare ground and dandelion, strip of fertilizer was added to see if that helped. Minimal plants detected in fall 2020

O'Dwyer: Grazing forage blends, seeded into thin stand that was overgrazed at timing of seeding and then grazed in the fall of 2020.

Fossum/Frost: Fall seeding planned with legume and grass species into old hayfield.

Field Days: Aug, Sept, Oct 1 field day each in Baytree, Montney, Sunset Community Pasture looking at interseeding in action both perennials and annuals.



Photo on the left is from foxtail site in the Sunset Community Pasture. On the right of the image is area that livestock have continuous access to and various management tools, spraying, mowing, and various seed mixes, on the left of the image shows the whole hillside where grazing has been restricted to 2 years. The results are phenomenal of recovering foxtail site by limiting livestock access.

R & D Report *continued*

2 Projects Completed March 2020

by Julie Robinson & Sandra Burton

Improving Productivity & Profitability of Forages

Year: 3 of 3 - **COMPLETE**

Project Lead: Sandra Burton, First Resource

Director Leads: Tara Holmes & Glenn Hogberg

Funding Partners: Peace Region Forage Seed Association, South Peace Grain, Blackbird Environmental, Forage Friendly Enterprises, UNBC, Roy Northern, DU, PRAD, Investment Agriculture Foundation of BC, Business Knowledge & Adaptation Fund.

Details: This project uses a systems approach to identify nutrient management & cropping practices that are more productive & profitable. Three types of demos are being set up & evaluated:

- ⇒ alternative non bloating legume options,
- ⇒ improved manure handling,
- ⇒ improved nutrient cycling through winter feeding or rotational grazing.

Cooperators for Demo Plots:

⇒ Established 17 demos with paired benchmarks with Fred & Liz Schneider, Andrew & Brian Clarke, Gordon & Brenda Lazinchuk, Shellie English, Stan & Shirley Smithard, Tara Holmes & Ben Harrington, Rob Larson, Jodi Kendrew, Craig Fossum & Brette Madden, Tobin Dirks, Clay & Ashley Armstrong, Bill Wilson & Julie Robinson, Heather Fossum.



Left photo: Sainfoin demo plot was established by Henry Braun & Shellie English to compare with/without a cover crop of oats. In 2019 there was more than enough moisture for both the sainfoin & the oat crops. In 2020 the sainfoin without the cover crop was more vigorous.

Information Shared:

Compiled 9 updates or articles in Forage First newsletters.

Completed 10 factsheets describing our methods & results for on farm demonstration plots & posted on PRFA's website.

Shared results at 14 field days & workshops within the region over the project's 3 years.

Enabled 24 members to participate in events outside the region.

Forage Starting Over Do's & Don'ts

Year: 3 of 3 - **COMPLETE**

Project Lead: Julie Robinson, Forage Friendly Enterprises

Director Leads: Jackie Thiessen & Darryl Kroeker

Funding Partners: Shell Canada, Encana, Progress Energy, Investment Agriculture Foundation of BC, South Peace Grain.

Details: This project explores innovative ideas to establish forages in the Peace River Region. It includes:

- ⇒ evaluating cover crops (the benefits & risks),
- ⇒ timing of seeding (including frost seeding),
- ⇒ use of soil amendments (including manure, compost, pulp slurry)
- ⇒ forage mixtures.

This project includes 2 research case studies:

1. timing of seeding, winter vs spring.
2. cover crops & their impact on establishing forage stands. The project also includes 3 demonstration case studies evaluating current forage establishment practices with new practices:
 1. cover crop demonstration looking at seeding rates & timing of seeding.
 2. soil amendments such as pulp mill slurry, chopped straw, compost, rates & recommend new standard practices.
 3. legume mix demonstration.

Cooperators & Sites: Shell Canada & Sunset Community Pasture, Encana, Progress Energy (2 sites), Jodi/ John/ Patt Kendrew (3 Sites), Fred & Liz Schneider, Greg Hanson - Peace River Ranch, Rod & Kim Strasky, Ed McCulloch.



Above right: is regular seeding rate of BC Forestry Mix & *on the left:* is 3 times the seeding rate 60 lbs/ac. No noticeable difference in plants.

Information Shared:

Compiled 9 updates in *Forage First* newsletters.

Completed plant identification cards.

Shared results at field days, tours & workshops.