

AUGUST GRAZING SERIES

2 Prescribed Fire: Forest to Pasture Conversion, Aug 13th

By Heather Fossom



On Aug 13th we visited a prescribed fire site on Jack Thiessen's that received a burn treatment this spring. The field was logged 15 years ago.

- * On 75 acres of the field, the goal was to exchange trees for native grass. No further diesel or equipment was used, other than vehicles during the prescribed burns, which have taken place every 4 years since it was logged. There was an unbelievable amount of regrowth from the poplars and he just keeps burning it.
- * Another portion of the logged field was cut/piled and seeded to tame forages. Over the years he has noticed more poplar regrowth on the portion that was seeded to tame.

The 75ac site was burned in April and enclosures, to prevent grazing, were installed. The first grazing occurred early July with 125 head for 10 days. The second grazing took place at the end of July with 55 head for 15 days. Jack mentioned it will be ready for a third grazing the second half of August.

Jack feels these 75 acres are an excellent example/demo of what can be done without diesel fuel.

Other methods to control woody regrowth:

- * His family has experimented with mulching regrowth. They found that incorporating that much green material into the soil significantly acidifies their soil for the long term. There is a difference between incorporating green vs dry/rotted wood.
- * Intensive grazing isn't a good fit for the large extensive nature of their operation. They graze cow/calf, not yearlings, and feel their calf gains would suffer to impact the aspen. They have fire skills/experience as they grew up with prescribed fire and will always use it to minimize wildfire risks around their yard sites & infrastructure.

Project Plan: evaluate how forage production/quality respond to prescribed fire & grazing practices, along with soil chemical/microbial properties and soil carbon.

Funders: the Beef Cattle Research Council (BCRC), AAFC Sustainable Canadian Agricultural Partnership Projects Component & BC Hydro Peace Ag Fund.

Partners: [Northern Fire WoRx](#), [Shifting Mosaics Corp](#), Agriculture & Agri-Food Canada, Jack Thiessen, Renee Ardill, Neil Ward & Bear Mtn Community Pasture.

- L: Looking at the April prescribed burn area & grazing enclosures.
R: Hundreds of dead aspen seedlings/suckers and lush native grass.

Prescribed Fire tips from Jack & James Thiessen

- * **Goal** on pasture is to impact the above ground woody material and leave the duff layer untouched. You never want to burn grass roots.
- * **Preparation:** build up fuel the year before by only grazing the pasture once (& time it during the first half of summer to allow for regrowth).
- * **Cut-off dates:** must be based on frost in the ground because you don't want to burn the duff or soil. "Usually it is early May but this year and last year it was in April."
- * **Burn plan:** always start with a burn plan but you must have the flexibility to change on the day. "When we started this burn in April the wind was one way. Then the wind changed so we had to change the plan."
- * **Sometimes you can't burn:** some years are too dry and some springs are too wet.
- * **Too often is no good:** if you burn every year you end up with fireweed instead of grass.
- * **Post-burn grazing:** cattle gravitate to the grass in burned areas. "Resist putting cows onto beautiful lush grass that is 5-6" high" cautions Jack. As "grass needs to photosynthesize in order to grow roots. For every 2" of grass height removed you lose 1/4" of root growth."
- * **Reduces the risk of wildfire:** "prescribed fire creates soil that is prepared for wildfire." It cleans up areas that can store fire and keep it smoldering into the soil. "When you do a spring burn, you rarely see wildfire on a piece of land again that season."

Project Duration: 3 years (2024, 2025 & 2026). Final reporting by March 2027.

4 Project Sites: Jack Thiessen's, Ardill Ranch, Neil Ward's, BM Community Pasture

Treatments: 1) unburned/ungrazed, 2) unburned/grazed, 3) burned/ungrazed, and 4) burned/grazed.