Forage Fact #123



Date: March 2025

Myth Buster: Prescribed Fire in Northeast BC

Project: Evaluating the Use of Prescribed Fire to Rejuvenate Forage Pastures and its Impact on Soil Health

Strategic use of Prescribed Fire can:

- reduce hazardous fuel buildup ,
- 2) improve pasture health and productivity
- 3) reduce wildfire risk, and
- 4) improve wildlife habitat.

"This project will provide important information to producers seeking pasture rejuvenation through prescribed fire, and also generate data to understand the impact of prescribed fire on soil carbon." Or S Leverkus

Factsheets from this project:

NE Range Prescribed Values Checklist for Ranchers

Webinars from this project:

1.Ruralization of Wildland Fire in the Peace Region 2.Legendary Fire Scientist Panel 3.Producer Panel of Prescribed Fire Practitioners

Contacts:

Nadia Mori (250) 263-8802 Dr. Sonja Leverkus, Lead Researcher, (250) 321-7069 Dr. Jillian Bainard, Lead AAFC Researcher jillian.bainard@agr.gc.ca

Published by P.R.F.A. of BC

For more Forage Facts visit: www.peaceforage.bc.ca

WHY Prescribed (Rx) Fire

Prescribed fire can be an important tool to increase pasture productivity, remove hazardous fuel buildup and reignite Indigenous cultural burning practices.

The loss of managed fire on the landscape has permitted brush encroachment which has been detrimental to pasture/rangeland health. At the same time, wildfire risk has increased due to climate change (particularly increased temperature and drought).

Truths about Prescribed Fire

While there are many myths about Prescribed Fire, which we will debunk throughout this factsheet, lets start off with a few truths.

Documentation for a Prescribed Fire Burn Plan includes:

- current & forecasted weather (wind speed, direction, temperature, and relative humidity if applicable),
- resources available to support safe implementation of the prescribed fire burn plan before, during & after ignition,
- notifications checklist complete, and
- etc., (as per prescribed fire burn plan).

You are required to follow the approved prescribed fire burn plan should you decide to start lighting up.

TRUE: All components of the prescribed fire burn plan must be met prior to ignition including: Test burn, Go-No-Go checklist and Documentation (see above).

If you light a prescribed fire in conditions outside of the prescription in your prescribed fire burn plan and overachievement occurs, you will be liable as the burn boss.

TRUE: A prescribed fire should only be ignited if all conditions from the prescribed fire burn plan are met.

If you decide to light up:

- with winds 50km/hr gusting to 75km/hr in a direction that will push smoke towards important values,
- with less than 20% relative humidity in a year of drought, or
- with receptive fuel and no precipitation in the forecast,
- ⇒ you will more than likely be outside of your prescription.



MYTH & FACTS

Range Agreement Holders are not allowed to burn on their range tenure.

Prescribed fire is a range development defined under S1(1) "range development" (d)(i).

Once you acquire a burn registration number from the BC Wildfire Service, you are committed to implementing your prescribed fire burn plan immediately. You do not have to implement your prescribed fire burn plan in a given year, however, you may need to request a new registration number as each year passes. Speak with your local Wildfire Officer in Fort Nelson, Fort St. John, or Dawson Creek for more details.

There are no resources available to help plan and implement a prescribed fire in NE BC.

The Peace River Forage Association project webpage contains resources regarding planning and implementing prescribed fire in NE BC.

https://peaceforage.bc.ca/rd-project/evaluating-the-use-ofprescribed-fire-to-rejuvenate-forage-pastures-and-its-impact-onsoil-health/

You have to be a Type 3 Burn Boss in order to do prescribed fire work in NE BC.

Burn Boss certification is currently only available for BC Government staff.

Just like the old days, you can have a verbal agreement and handshake with a map on the back of a napkin and then go and light up.

For Range Tenure Holders in NE BC, two documents are required to be submitted to the BC Government:

- NE Range Prescribed Values Checklist for Ranchers (listed on PRFA Project webpage).
- 2. Prescribed Fire Burn Plan including map (https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/prescribed-burning/planning-a-burn)

Currently, approved prescribed fire burn plans are often sent either by email or in the mail from the BC Wildfire Service with a signed off signature page from the Land Manager (District Manager or BC Parks) and approval from the Wildfire Officer and the Prince George Fire Centre Manager. Additional requirements or notices are typically included in the authorization letter along with an expiration date.

MYTH & FACTS

Once you have the registration number, approved prescribed fire burn plan, and letter from BC Wildfire Service (BCWS), you can light up anytime all year long.

It is very hard to acquire a burn registration number.

There is only one category of fire in BC.

Private land owners are not allowed to burn on their property.

When people set fire, fire often escapes.

Both the Go-No-Go Checklist & timing windows must be met prior to igniting your prescribed fire. Depending on the weather conditions, particularly in prolonged droughts with potential for significant fire behaviour, extensions may be requested and approved if appropriate.

To acquire a registration number call the burn registration line at: 1-888-797-1717 and review the following link to help guide you through the process: https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/fire-bans-and-restrictions/ofts-burn-registration

There are 4 categories of open burning in BC.

Check out this website for more details: https://www2.gov.bc.ca/gov/content/safety/wildfirestatus/prevention/fire-bans-and-restrictions/openburning

You can burn on your property as long as you have a registration number from BC Wildfire Service, there are no burn bans, and you have appropriate resources to adequately manage the fire you light.

Additional considerations would include: cold-trailing the perimeters and/or entirety of the area you burn, adequately managing smoke per the Open Burning Smoke Control Regulation (including an understanding of venting indices as they relate to smoke management), etc.

Depending on the conditions and amount of fire applied to the land, fire does not always escape. If you remain within your prescription that details resources for containment there should not be an opportunity for overachievement.

If you proceed with ignition after one negative response on the Go-No-Go checklist, you may be setting yourself up for legal ramifications.

Project Plan: assess forage production/quality following prescribed fire & grazing, along with soil chemical/microbial properties and soil carbon.

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

Project Sites: 4 sites (Jack Thiessen's, Ardill Ranch, Bear Mountain Community Pasture and Peace River Ranch).

Treatments:

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

Project Purpose:

Provide important information to producers seeking pasture rejuvenation with prescribed fire, and generate data to understand the impact of prescribed fire on soil carbon.

Project Website:

https://peaceforage.bc.ca/rd-project/evaluating-the-use-ofprescribed-fire-to-rejuvenate-forage-pastures-and-its-impact-onsoil-health/

You can implement a prescribed fire by yourself.

It depends on the amount of fire, containment, and weather conditions. When you start a fire by yourself and it grows bigger and more intense, you will be liable for the results.

Useful Resources for Prescribed Fire Planning

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/for-industry-commercial-operators/high-risk-activities

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/fire-bans-and-restrictions

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/governance/legislation-regulations



Ignition Work, Ardill Ranch, April 20th 2024

Key Messages

- ⇒ Range Tenure Holders need to submit a NE Checklist for Range Values and a Prescribed Fire Burn Plan. Once approved a letter from BC Wildfire Service and a registration number are also needed.
 - The Go-No-Go checklist and timing windows in the prescribed fire burn plan must be met prior to the Test burn.
- ⇒ Private Land Owners need a registration number from BC Wildfire Service.
- ⇒ All parties need to ensure there are no burn bans and they have appropriate resources to adequately manage the fire they light.

Compiled by: Dr. Sonja Leverkus with formatting assistance from Heather Fossum.

Project Partners: Northern Fire WoRx, Shifting Mosaics Corp, Agriculture & Agri-Food Canada,

Jack Thiessen, Renee Ardill & Karen McKean, Peace River Ranch and Bear Mountain Community Pasture.

Funding Partners for this Project

Funded by Agriculture and Agri-Food Canada's AgriScience Program under the Sustainable Canadian Agricultural Partnership, the Beef Cattle Research Council (BCRC) and the BC Hydro Peace Agricultural Compensation Fund.











