

Sustainable Canadian Agricultural Partnership

Competitive. Innovative. Resilient.

Silvopasture In British Columbia Information Series

Unit 4.c.2. Case Study: Adaptive Management at Aveley Ranch



Acknowledgments

This work has been funded by the Governments of Canada and British Columbia under the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

Photos in this presentation are courtesy of Aveley Ranch and Unsplash.

Disclaimer

Opinions expressed in this presentation are those of the author and not necessarily those of the Government of Canada or the BC Ministry of Agriculture and Food. The Government of Canada, the BC Ministry of Agriculture and Food, and their directors, agents, employees, or contractors will not be liable for any claims, damages, or losses of any kind whatsoever arising out of the use of, or reliance upon, this information.

Silvopasture in BC Information Series Content Guide



Core Units

Case Studies

Supplemental Units

0. Series Overview

1. Introduction

2. Science Behind SP

3.1. SP BMPs - part 1

3.2. SP BMPs - part 2

4. SP Planning

2.c.1 Production Synergies:
Kootenay Tree Farms

2.c.2 Riparian Silvopasture:
Silver Hills Ranch

3.c.1 Small-lot SP: Just Another
Weed Patch Farm

3.c.2 Mature Forest to SP:
Indian Gardens Ranch

4.c.1 Planning on Crown Land:
SP Pilot Project

**4.c.2 Adaptive Management at
Aveley Ranch**

1.s. History of SP in BC

2.s.1. Light & Microclimate

2.s.2. Hydrology

3.s. Managing Damage

Unit 4.c.2. Case Study: Adaptive Management at Aveley Ranch



Goal

Gain a deeper understanding of silvopasture planning, implementation and management through British Columbia case studies.

Prerequisites

Units 3. Beneficial Management Practices, and 4. Planning Silvopasture.

Content

Adaptive planning methods: Aveley Ranch.

Adaptive Management

Planning in Complex Systems

- Silvopasture can combine complexity with limited local research and information.
- Errors can have long-term impacts in long-lived systems.
- Challenges addressed with adaptive management approach.



Adaptive Management

Adaptive Management



- Structured ‘trial and error’ in the face of uncertainty.
- Changing assumptions and interventions based on new information gained through experience.
- Allows you to adapt and respond to changing markets, regulations and climate.

Silvopasture in Diverse Production

Aveley Ranch

- Multi-generational sheep farm homesteaded in 1906.
- Up to 1300 Corriedale ewes.



Silvopasture in Diverse Production

Aveley Ranch



- Forested and alpine Crown range.
- Private range, pasture and silvopastures.

Silvopasture in Diverse Production

Aveley Ranch

- Woodlot licence on land adjacent to Crown range.



Silvopasture For Diverse Production

Generations of Silvopasture Experience



- Started converting forests into silvopastures in the early 20th century.
- Continues to develop new silvopastures on private land.



Silvopasture For Diverse Production

Generations of Silvopasture Experience

- Forest cutblock vegetation management with sheep in the 1980s and 1990s.



Silvopasture For Diverse Production

Silvopastures Help Meet Multiple Goals

- Create incremental forage with improved tree quality.
- Shelterwood management with pruning 3-m up the tree .
- Higher quality, seasonal grazing opportunities and shade benefits flock welfare.
- Works with the natural potential and flow of the land.



Adaptive Silvopasture

Lessons Learned at Aveley: Monitoring

- Continuous monitoring and evaluation for better data-driven decisions.
- Monitoring use:
 - See trends.
 - Proactive maintenance.
 - Find efficiencies.



Adaptive Silvopasture

Lessons Learned at Aveley: Scale



- Creating and maintaining silvopastures requires time and resources
- If ungrazed after treatment, they will revert to closed forests.
- Only convert as much ground into silvopasture as you can graze.

Adaptive Silvopasture

Lessons Learned at Aveley: Fencing

- Need adequate fencing in place.
- Consider adjacent pastures and resting locations for sheep.



Adaptive Silvopasture

Lessons Learned at Aveley: Fencing

- Additional costs and maintenance with electric fences in silvopastures.



Adaptive Silvopasture

Lessons Learned at Aveley: Water



- Water always needed for quality lamb and wool production.
- Water the biggest cost and most important factor in livestock distribution.
- Silvopastures help to conserve water supplies and reduce heat stress and water demand.



Questions and Discussion

