

Sustainable Canadian Agricultural Partnership

Competitive. Innovative. Resilient.

Silvopasture In British Columbia Information Series

Unit 3.c.2. Case Study: Mature Forest to Silvopasture at Indian Gardens Ranch



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Silvopasture in BC Information Series Content Guide



Core 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

Case Studies

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

Supplemental Units

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: Indian Gardens Ranch

Goal

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

Prerequisites

Units 3. Beneficial Management Practices.

Content

Ingrown, mature forest to silvopasture: Indian Gardens Ranch.



Forest Ingrowth on Open Range

Fire Maintained Ecosystems

- Forest ingrowth – smaller component of grass and shrub openings.
- Impacts to wildlife habitat and forage production.



Forest Ingrowth on Open Range

Fire Maintained Ecosystems



- Forest ingrowth - susceptible to catastrophic wildfires, forest disease and pest outbreaks.

Silvopasture and Range Management

From Forest Grazing to Silvopasture

- Early use on low elevation open forests.
- Shift to mid- and high elevation plantations.
- Silvopasture is a supplementary tool to help restore grazing and natural values.



Silvopasture to Enhance Production

Indian Gardens Ranch

- Multi-generational family ranch in the Thompson River Valley.



Silvopasture to Enhance Production

Indian Gardens Ranch



- Seasonal grazing – moving with the natural patterns of forage availability.
- Mix of Crown grazing licences and lease with private land base.

Silvopasture to Enhance Production

Indian Gardens Ranch

- Woodlot licence on land adjacent to Crown range.



Silvopasture To Enhance Production

Diverse Forage Sources to Meet Operational Goals



- Ranch viability centres on grazing resources to maintain their herd.
- Increasing forest density restricting late spring grazing.

Silvopasture Development

Pre-Harvest Planning

- Increase forage without removing all tree cover.
- Professional Forester developed pre-harvest plan for Licence to Cut.
- Mosaic of trees retained, with more than half of the cover removed.



Untreated area of grazing lease

Silvopasture Development

Timber Harvest



Treated area of grazing lease

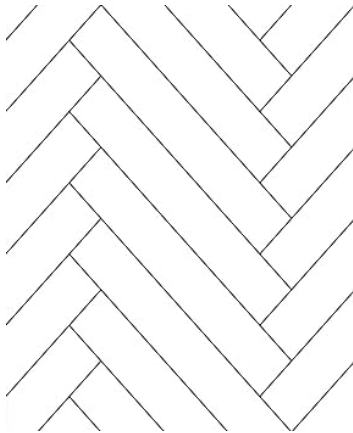
- First pass: hand fall and excavator with clam-shell attachment.
- Second pass: feller buncher, hand falling, bucking and skidder.



Silvopasture Development

Timber Harvest

- Herringbone skid trails.
- Labour intensive and higher cost than clear-cutting



Mature trees retained in multi-row design

Silvopasture Development

Results



- Success: understory production is flourishing.
- Retained timber is enhanced.



Silvopasture Development

Co-benefits

- Enhanced wild ungulate habitat.
- Lower wildfire hazard.
- Enhanced carbon storage.



Questions and Discussion

