

Targeted Grazing: Sheep/Goat Vegetation Management with Unique Grazing Scenarios Syllabus

Course Overview: This course is designed to provide a comprehensive understanding of grazing management for sheep and goats, with a focus on vegetation control, land sustainability, animal welfare, and business planning. The course consists of five primary modules and a detailed sub-module section on unique grazing techniques. The course will require between 10-15 hours to complete, with quizzes and exams included at the end of each module to test understanding.

Course Requirements:

Completion of modules in sequence: Module 1 to Module 5.
Minimum 90% grade required to progress to the next module.
Unlimited attempts for quizzes and exams.

Module 1: Grazing Principles (Approx. 2-3 hours)

Module Overview: This module covers the foundational principles of grazing management, including water management, livestock care, and range health. Learners will explore the importance of effective grazing management for farm sustainability and the necessary steps to create a grazing management plan.

Learning Objectives:

- Understand the critical role of water in a grazing operation.
- Identify types of livestock guardian animals and their uses.
- Explain the parasite life cycle and common parasites in sheep and goats.
- Apply carrying capacity calculations.
- Discuss the steps in developing a grazing management plan.
- Learn how to monitor rangeland health.

Assessments: Quiz on grazing principles and calculations.

Case study discussion: Designing a grazing management plan.

Module 2: Grazing Tame and Native Forage (Approx. 2-3 hours)

Module Overview: This module delves into the difference between native and tame forages, focusing on how to manage these forages for effective grazing. Understanding plant species and adapting grazing techniques to specific land types are key takeaways.

Learning Objectives:

- Differentiate between increaser, decreaser, and invader plant species.
- Define range condition and how to assess it.
- Identify the five Canadian prairie ecoregions and the plant communities in each.
- Understand stocking rate and how to manage for it.
- Discuss the timing of grazing in relation to plant growth stages.
- List and explain different grazing systems.
- Learn how to manage forages to prevent overgrazing.

Assessments: Quiz on forages and grazing systems.

Practical exercise: Determining range condition and stocking rate.

Module 3: Stockmanship and Animal Welfare (Approx. 1-2 hours)

Module Overview: This module provides a basic overview of stockmanship and animal welfare, covering sheep behavior, transportation, and the ethics of animal handling.

Learning Objectives:

- Recognize normal and atypical sheep behavior.
- Understand the flight zone and factors that influence it.
- Learn methods of moving sheep efficiently and humanely.
- Distinguish between different breeds of stock dogs and their specific purposes.
- Review animal transportation and welfare legislation.

Assessments: Quiz on sheep behavior and welfare practices.

Practical discussion: Identifying stock dog breeds and their roles.

Module 4: Building a Business Plan (Approx. 2-3 hours)

Module Overview: This module guides learners in creating a business plan for their sheep or goat operations. It focuses on goal setting, strategy development, and financial planning to ensure sustainable and profitable operations.

Learning Objectives:

- Understand the key components of a business plan.
- Learn how to define business objectives and strategies.
- Develop a financial plan for a grazing business.
- Understand management and operational strategies for sustainable business growth.

Assessments: Quiz on building a business plan

Business Plan Template: Develop a preliminary business plan based on a hypothetical sheep grazing operation.

Module 5: Unique Grazing (Approx. 4-5 hours – if completing all the sub-modules)

Module Overview: This module introduces alternative grazing methods and case studies to showcase innovative ways to use grazing for vegetation management. Learners will explore each unique grazing technique's benefits, risks, and logistics. Students can choose one or more of the sub-modules to complete.

Sub-Module 5.1: Grazing Under Solar Panels / Agrivoltaics

Overview: Learn how dual land use in solar farms allows for sheep grazing while producing solar energy. This technique brings sustainable land management and alternative energy production together.

Learning Objectives:

- Understand the concept of agrivoltaics and solar grazing.
- Analyze the advantages and risks of grazing under solar panels.
- Explore opportunities for integrating solar energy with agriculture.

Sub-Module 5.2: Grazing Powerline Cut Blocks

Overview: This section examines the use of sheep to manage vegetation in powerline cut blocks, improving survival rates of trees and reducing competition for seedlings.

Learning Objectives:

- Learn about the benefits of grazing powerline cut blocks.
- Understand the conditions required for successful grazing.

Discuss the management of forage and vegetation control in cut blocks.

Sub-Module 5.3: Grazing Forested Areas

Overview: Explore grazing in forested rangelands, its benefits, risks, and how forested areas differ from grasslands in terms of grazing management.

Learning Objectives:

- Understand the unique challenges of grazing in forested areas.
- Identify different forest types and their impact on grazing.
- Learn the benefits and risks of grazing in forested environments.

Sub-Module 5.4: Urban Grazing

Overview: Urban grazing is growing in popularity as cities seek ways to manage public spaces and vegetation. This section covers urban grazing initiatives and their logistics.

Learning Objectives:

- Explore the logistics and benefits of grazing in urban parks.
- Understand how urban grazing differs from traditional vegetation management methods.
- Learn about the implementation of grazing in large metropolitan areas.

Sub-Module 5.5: Grazing to Meet Landscape Goals and Control Invasive Species

Overview: Learn how grazing can be used to meet landscape management goals, particularly in controlling invasive plant species.

Learning Objectives:

- Understand how grazing can manage invasive plant species.
- Explore the landscape goals that can be achieved through targeted grazing.
- Analyze case studies of grazing for weed control.

Case Study Analysis: Case studies are provided after each sub-module.

Assessments: Quiz covering unique grazing methods after each sub-module.

Final Exam and Course Completion - Upon completing all modules, learners must pass a final exam that assesses knowledge from all five modules and sub-modules. A passing score of 90% or higher is required for certification.

Certification: Upon successfully completing the course and final exam, learners will receive a certificate from the Alberta Lamb producers for the course.

Total Estimated Course Duration: 10-15 Hours