

Alberta Lamb Producers

Sheep Infrastructure Guide



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This guide contains over 100 of the best planning and infrastructure documents we could find from around the world. Our goal was to help new and existing Alberta sheep producers find the information they need to set up a successful operation. The guide is set up into 11 sections including:

1. Business planning and management
2. Regulations & guidelines
3. General farm design
4. Information Management
5. Buildings & Pens
6. Utilities
7. Feed and water
8. Handling
9. Fencing
10. Manure
11. Deadstock

Let us know if this guide helped you, and/or if you come across a document that you think should be added to this listing!

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The information in this document should not be used as a substitute for obtaining suitable professional advice.

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1. Business Planning & Management

- 1.1 [Alberta Sheep Business Guide](#) (58 pages) – Comprehensive business planning guide
- 1.2 [Cost of Production Fact Sheet](#) (2 pages) – Overview
- 1.3 [ALP Cost of Production Tool](#) (16 pages) – Industry leading Excel-based computer program that calculates COP and what changes can improve your returns. Also includes additional business tools to calculate cash flow, etc.
- 1.4 [Better Returns by Labour Cost Savings](#) (2 pages) – UK labour savings tips
- 1.5 [Better Returns from Monitoring Ewe Performance](#) (2 pages) – Managing ewes to increase returns.

2. Regulations & Guidelines

- 2.1 Code of Practice – Sheep Summary [Fact Sheet](#) (2 pages)
- 2.2 Code of Practice – Sheep (106 pages) – [Comprehensive guidelines](#)
- 2.3 Agricultural Operation Practices Act (AOPA) (2 pages) - [Summary Guide](#)
- 2.4 [Confined Feeding Operations](#) (AOPA Guide) – (19 pages)
- 2.5 [Agriculture Operations Practices Act Regulation](#) (40 pages)
- 2.6 Agricultural Operations Practices Act, [Part 2](#) Matters Regulation (8 pages)
- 2.7 Confined Feeding Operations (AOPA) – [Role of Municipalities](#) (6 pages)
- 2.8 [Do I need a building permit?](#) (4 pages) – Outlines when you need a permit, the types of permits you may need, and where to get them.
- 2.9 Traceability in Alberta (2 pages) – [Summary](#)
- 2.10 Premises ID Regulations (5 pages) – [Fact Sheet](#)
- 2.11 Purchasing Medications (5 pages) – [Fact Sheet](#) relating to Premises ID
- 2.12 Premises ID Regulation (12 pages) – [Alberta Regulation](#)
- 2.13 Alberta’s Water Priority System (one page) – [Fact sheet](#)
- 2.14 Alberta Water Act FAQ (one page) – [Fact sheet](#)
- 2.15 Water Act Licenses (one page) – [Fact sheet](#)
- 2.16 Livestock Trucking Guide (4 pages) – [Guidelines](#)
- 2.17 Humane Handling Guidelines for Sheep (40 pages) – [Comprehensive guide](#)

3. General Farm Design

- 3.1 Alberta Sheep Facilities (3 pages) – [General overview](#) of farm set-up
- 3.2 Sheep Farmstead Planning (12 pages) – [Farm planning process](#)
- 3.3 Farmstead Planning – (24 pages) – Excellent detailed [farm design](#) recommendations
- 3.4 Odor Control for Livestock Facilities (5 pages) – General farm design for [odor control](#)
- 3.5 [Planning Farm Shelterbelts](#) (5 pages)

4. Information Management

- 4.1 Producing Profits with RFID – (2 pages) – RFID systems [fact sheet](#)
- 4.2 [RFID Management Systems](#) (1 page) – Choosing equipment and software
- 4.3 [Barn Record Sheet](#) – (one page) – paper lambing information record sheet
- 4.4 [Individual Ewe Record](#) (one page) – paper individual ewe record sheet
- 4.5 [Farm Accounting Software](#) (2 pages) – Frequently Asked Questions

5. Buildings & Pens

Structures

- 5.1 [Pen Space](#) for Lambing (1 page) – Space recommendations
- 5.2 Open-end Pole Sheep Barn (2 pages) – [Overview](#)
- 5.3 Expandable Lambing Barn/Unit (4 pages) – [Example](#) of a lambing barn
- 5.4 Plastic and Fabric Covered Arch-Frame Buildings (14 pages) - [Resource](#)
- 5.5 Hay Storage – Planning & Design Guidelines (7 pages) - [Options](#)

Lambs

- 5.6 Portable [Claiming Pen](#) (2 pages) – Note: Alter this plan to 5'x5' for prolific breeds
- 5.7 Lamb Adoption System (one page) – [Example](#)
- 5.8 [Artificial Rearing](#) of Lambs (9 pages) – Keeping orphan lambs alive and saving labour.
- 5.9 [How Lamb](#) Milk Feeder Technology Contributes to Sustainability (3 pages) – Eco (commercial lamb milk feeder) benefits. Note – most producers just use nipple buckets.
- 5.10 [Automatic Milk Feeder](#) – Eco Brochure (4 pages) – Example (not an endorsement) as there are many other automatic milk feeders are on the market.

Other Building Considerations

- 5.11 [Rodent & Bird Control](#) in Farm Buildings (7 pages)
- 5.12 Slotted Floor Sheep Barn Plan (2 pages) – [Overview](#) – May offer value for larger operations, albeit these are not common!
- 5.13 Slotted Floor Sheep Barn (7 pages) – [Detail](#)
- 5.14 PEI lambs thrive on slotted floors (2 pages) - [Article](#)

6. Utilities

- 6.1 Fan Ventilation [Principles](#) and Air-flow Rates (11 pages)
- 6.2 [Ventilation](#) of Sheep Structures (8 pages)
- 6.3 Sizing Openings for [Naturally Ventilated Barns](#) (9 pages) – Dairy, poultry, swine focused but can be adapted.
- 6.4 Troubleshooting Livestock & Poultry [Ventilation Problems](#) (7 pages)
- 6.5 [Ventilating & Heating](#) Small Livestock Rooms (8 pages)

- 6.6 [Heaters Buyers Guide](#) (4 pages) – Commercial heating options and guide.
- 6.7 [Hot Water Heating](#) (10 pages) – Older document that does not include modern air to water mono-block heat pump options, but it has excellent information.
- 6.8 [Lighting for Sheep Facilities](#) (10 pages) – Older document that does not include modern LED information but is excellent otherwise.
- 6.9 [Is Solar Worth It?](#) (one page) – Overview of photovoltaic solar arrays

7. Feed & Water

- 7.1 Feeding Systems for Sheep (4 pages) – [Overview](#) and space requirements
- 7.2 Total Mixed Rations for the Ewe Flock (12 pages) – Very large flock [option](#)
- 7.3 Bunker Silo Sizing and Management (4 pages) – Silage [information](#)
- 7.4 Harvesting and Storing Large Bale Haylage (8 pages) – [Resource](#)
- 7.5 Round Bale Feeder Design on Feed Waste - Sheep (9 pages) – [Reducing waste](#)
- 7.6 Selecting a Round Bale Feeder (6 pages) – Horse focused but relevant [information](#)
- 7.7 Hay Storage [Cost Comparison](#) (1 page)
- 7.8 Walk Through Hay and Grain Feeder (2 pages) – [Feeder design](#)
- 7.9 Sheep Salt & Mineral Feeder (2 pages) - [Plan](#)
- 7.10 Portable Mineral Box [Plan](#) (2 pages)
- 7.11 SheepBytes Ration Balancer (3 pages) - [Overview](#)
- 7.12 The ABCs of Livestock Watering Systems (12 pages) – [Volume needed and design](#)

8. Handling

Handling

- 8.1 Labour Efficiencies of Handling Systems (one page) – [Value of labour efficiency](#)
- 8.2 Better Returns from Effective Sheep Handling (2 pages) – [Fact sheet](#)
- 8.3 Improving Sheep Handling for Better Returns (16 pages) – [Excellent manual](#)
- 8.4 Using Stock Dogs for Low Stress Livestock Handling (4 pages) – [Resource](#)
- 8.5 Handling Systems for Sheep (2 pages) – [Fact sheet](#)
- 8.6 Planning Your Sheep Handling Facility (4 pages) – [Guidelines](#)
- 8.7 Sheep Corral Unit (2 pages) – [Large system plan](#)
- 8.8 Working Chute [Plan](#) (3 pages)
- 8.9 Sheep Corral Fencing & Gates (2 pages) – Wooden fence and gate [plan](#)
- 8.10 Circular sheep yard design and construction (14 pages) – Excellent design [plan](#)
- 8.11 Top Performers (RFID Sorting Equipment and Systems) (8 pages) – [Older document](#)
- 8.12 Selecting a Sheep Handler (4 pages) – Larger operation focus, but good [information](#)

Shearing

- 8.13 Shearing Facilities (2 pages) – [Plan](#)
- 8.14 Shearing shed design 1 – sheep storage and movement (8 pages) – Detailed [plan](#)
- 8.15 Shearing shed design 2 – the board (6 pages) – Detailed [plan](#)
- 8.16 Shearing Floor and Fleece Sorting Table (2 pages) – [Plan](#)

Transportation & Other

- 8.17 Avoiding Heat & Cold Stress in Transported Sheep (4 pages) – [Fact sheet](#)
- 8.18 Web Links & Resources for Sheep Infrastructure (3 pages) – [Manufacturer links](#)

9. Fencing

- 9.1 Fencing in Alberta (3 pages) – [Overview](#) of fencing options
- 9.2 Page Wire Fencing (2 pages) – Basic page wire fencing [design](#)
- 9.3 Fencing Options in Predator Control (4 pages) – [Summary](#) of options and design
- 9.4 Guardian Animals in Alberta (4 pages) – A good [overview](#) of options and effectiveness
- 9.5 Protecting Livestock from Predation with Electric Fences (4 pages) – [Information](#)
- 9.6 Frequently Asked Questions about Electric Fencing (2 pages) – [Useful tips](#)
- 9.7 Windbreak Fences (3 pages) – [Basic overview](#)
- 9.8 Portable Windbreak Fencing (8 pages) – [Excellent guide and plans](#)

10. Manure

- 10.1 [Managing](#) Livestock Manure – (4 pages) – Focus is manure management
- 10.2 [Minimum](#) Setbacks for Manure Application (2 pages) – Focus is regulations and setbacks
- 10.3 [Manure](#) Composting Manual (27 pages) – A detailed manual on how to compost manure

11. Deadstock Management

- 11.1 Disposal of Dead Animals Regulation (16 pages) – Alberta Government [regulations](#)
- 11.2 Livestock Mortality Management ([Disposal](#)) (21 pages) – This is an excellent and comprehensive guide, but since it is older, review the applicable sections in the Disposal of Dead Animals Regulation above.
- 11.3 Livestock Mortality [Burial Techniques](#) (30 pages) – This is also an excellent and comprehensive guide, but it is also an older document so reviewing the applicable sections in the Disposal of Dead Animals Regulation is advised.
- 11.4 Disposal Vessels for On-Farm Deadstock (8 pages) – [Fact sheet](#)
- 11.5 Composting Dead Sheep and Lambs (3 pages) – [Guide](#)