# Small Lot Pork Producer Management & Production















## **ACKNOWLEDGEMENTS**

Funding was provided in part by the B.C. Pork, through the Hog Industry Development Fund and the Canadian Agricultural Partnership, a five-year, \$3 billion investment by federal, provincial and territorial governments to strengthen the agriculture, agri-food and agri-based products sector, ensuring continued innovation, growth and prosperity.

Thank you to the many subject matter experts who reviewed and contributed material to this Resource Manual. Special recognition to Prairie Swine Health Services who were contracted to develop the Manual.

Recognition is also extended to the following parties for graciously providing photos: Alberta Pasture Pig Producer and Breeder (pg. 4-14, 6-4, 6-7, 6-9, 7-28); B.C. Government (pg. 5-10, 6-1, 10-13); Dr. D. Gregg (pg. 7-18); Dr. Egan Brockhoff (pg. 6-12, 7-22); Dr. Kelsey Gray (pg. 2-2, 2-3, 4-2, 4-3, 4-4, 4-7, 4-10, 4-12, 4-13, 4-18, 5-8, 5-9, 6-1, 6-3, 6-6, 6-7, 6-9, 6-11, 6-12, 7-22, 7-29, 8-5, 8-6, 8-14, 11-3, 11-6); Dr. Malachy Young (pg. 5-9); Dr. Ryan Brook (pg. 9-2, 9-3, 9-4); Dr. Ted Clark (pg. 7-22); J. Woods Livestock Services (pg. 12-8, 12-9); National Pork Board (pg. 2-2, 2-3); and Plum Island Animal Disease Centre (pg. 7-16, 7-18).

## **LEGAL DISCLAIMER**

The materials presented in this Resource Manual were current at the time of publication and are believed to represent best management practices for swine production recommended by subject matter experts. Neither B.C. Pork nor any of its funding partners or content providers shall be held liable for any improper or incorrect use of information described and/or contained herein and assumes no responsibility for any direct, indirect, incidental, special, exemplary, or consequential damages that anyone incurs from the use of this information.

Neither B.C. Pork nor any of its funding partners or content providers is responsible nor constitutes endorsement for the contents of any links to other pages on the World Wide Web that are referenced in this Manual. These links are for convenience only. It is the responsibility of the user to evaluate the content of linked pages for accuracy and usefulness of information.

Opinions expressed in this document are those of the author and not necessarily those of Agriculture and Agri-Food Canada or the B.C. Ministry of Agriculture. The Government of Canada, the B.C. Ministry of Agriculture 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.

All legislation identified in this Manual refers to British Columbia or Canada legislation. This publication should not be viewed as a substitute for legal advice. An individual or farming operation that requires legal advice regarding legal requirements or potential liability should retain a lawyer who can examine the current state of applicable law and has acquired an understanding of the farm's particular circumstances.

## FOR FURTHER INFORMATION

Please view B.C. Pork's website (www.bcpork.ca) under Small Lot Pork Producers for the most current version of this Resource Manual. Section revisions will be dated when additional information is provided and new section(s) will be added and dated as required. For additional reading, a complete reference list is provided in REFERENCES at the end of the Manual.

Edition 1.0 (June 1, 2020)

This publication may be reproduced in whole or in part for any purpose (except for resale) provided that its source is fully acknowledged.





## INTRODUCTION

### **OBJECTIVE**

This resource manual will provide basic information about raising pigs safely and humanely. During development, multiple resources were referenced. Use this manual as a guide to understand how to:

- Raise healthy pigs responsibly and respectfully in accordance with government legislation;
- Economically produce high quality, safe pork products; and
- Effectively respond in emergency situations.

### INSTRUCTIONS



- Key Point Checklist Listed in each section, the key point checklist includes regulation requirements, national security, and important human and animal health related topics.
- **Definitions** Use definitions to familiarize yourself with basic swine terminology.
- **Sections** Each section is topic specific.

This resource manual is for small lot pork producers varying in size from individuals raising one pig for personal consumption, to those raising many pigs for the purpose of generating income. It provides details on good husbandry practices, production economics, marketing, euthanasia, emergency management, and provincial and federal legislation. Raising pigs can be an enjoyable and rewarding experience. Before venturing into pork production, familiarize yourself with all aspects of this publication.

Very few educational materials exist that are current, comprehensive and tailored to the highly diverse needs of small lot (backyard) pork producers. Many farmers with good intentions but little knowledge of raising pigs are soon confronted with health issues, poor growth, mortalities, wasted resources, and significant financial losses. This publication is to help avoid these problems.



Biosecurity is highly important to all livestock producers, both commercial and small lot farmers. It is a term that refers to the collection of practices and procedures that are employed to keep livestock healthy and is particularly appropriate for pigs. All elements of pork production, whether in a small- or large-scale operation, are essential to the execution of good biosecurity. Effective biosecurity would be impossible without management of housing and fencing, adequate husbandry practices, infectious disease prevention strategies, and implementation of all these elements of pork production.

This publication is a collation of information from many subject matter experts, and their contributions are gratefully acknowledged. References to recognize the information sources is provided at the end of each section. A complete listing of all references is provided in REFERENCES at the end of the Manual. We appreciate and acknowledge all contributors of photos.

This Resource Manual will be distributed to attendees at workshops held for small lot pork producers in B.C. The most current version of this manual will be available to view and/or download from B.C. Pork's website (www.bcpork.ca) under 'Small Lot Pork Producers'.

Jack Dewit President B.C. Pork Producers Association PO Box 8000 - 280 Abbotsford, B.C. V2S 6H1

Tom Droppo, M.Sc., P.Ag. Swine Industry Specialist B.C. Ministry of Agriculture 1767 Angus Campbell Rd. Abbotsford, B.C. V3G 2M3



ACK	NOWLEDGEMENTS	i
LEG	AL DISCLAIMER	i
FOR	FURTHER INFORMATION	ii
INTF	RODUCTIONOBJECTIVEINSTRUCTIONS.	iii
SEC	TION 1: SWINE LEGISLATION	
1.1	INTRODUCTION	1-1
1.2	PIGTRACE	
1.3	NATIONAL INDUSTRY LED PROGRAM – CANADIAN PORK EXCELLENCE	1-5 1-5
1.4	NATIONAL FARM ANIMAL CARE COUNCIL (NFACC) CODES OF PRACTICE Code of Practice for the Care & Handling of Pigs	
1.5	FEDERAL TRANSPORT REGULATIONS	1-7
1.6	PROVINCIAL LEGISLATION IN BRITISH COLUMBIA  Prevention of Cruelty to Animals Act (PCA Act)  B.C. Society for the Prevention of Cruelty to Animals  Food Safety Act  Water Sustainability & Water Protection Acts  Environmental Management Act  Farm Practices Protection (Right to Farm) Act (FPPA)  Local Government Act (LGA)  Animal Units (A.U.)	1-7 1-7 1-8 1-9 1-9 1-10
SEC	TION 2: GETTING STARTED	
2.1	WHY PIGS?	2-1
2.2	COMMON BREEDS	2-1
2.3	UNDERSTANDING PRODUCTION GOALS	2-4
2.4	BUYING & SELLING PIGS	2-5
2.5	RECORD-KEEPING	2-7



SEC	TION 3: PRODUCTION ECONOMICS	
3.1	KEY FACTORS FOR SUCCESS	3-1
3.2	RECORD-KEEPING BASICS	3-2
3.3	WHAT IS AN ENTERPRISE BUDGET?	3-3
3.4	DIRECT EXPENSES (VARIABLE COSTS)	3-4
3.5	INDIRECT EXPENSES (FIXED COSTS)	3-6
3.6	CAPITAL EXPENSES (DEPRECIATION & INVESTMENT)	3-7
3.7	LABOUR EXPENSES	3-8
3.8	FOCUSING ON THE RIGHT INFORMATION	3-9
3.9	INSTRUCTIONS – ENTERPRISE BUDGET WORKSHEET	3-9
SEC	TION 4: HOUSING & MANAGEMENT	
4.1	FENCING & PROTECTION FROM PREDATORS	4-1
4.2	HOUSING. Shelters – Indoor & Outdoor Space. Bedding & Wallowing.	4-3 4-3 4-5 4-6
	Supplemental Heat Lighting Ventilation Housing Sows.	4-7 4-8 4-9 4-10
4.3	HYGIENE.  Cleaning & Disinfection  Rodent & Pest Control.	4-1° 4-1° 4-14
4.4	HOSPITAL PENS	4-15
4.5	SOCIAL INTERACTIONS	4-15
4.6	ANIMAL HANDLING & SAFETY  Pig Tips  Equipment.	4-16 4-17 4-18
SEC	TION 5: NUTRITION & FEEDING MANAGEMENT	
5.1	NUTRITION BASICS & REQUIREMENTS	5-2
5.2	FEED SAFETY	5-7
53	WATER	5-1



5.4	PASTURED PIGS	5-12
5.5	BODY CONDITION SCORING.	5-13
SEC	TION 6: THE PIG – WHAT TO EXPECT	
6.1	REPRODUCTION MANAGEMENT Puberty & Sexual Maturity Female Estrous or Fertility Cycle Female Estrus or "Heat" Breeding. Boar Care	6-2 6-2 6-2 6-3 6-4 6-5
6.2	PREGNANCY/GESTATION	6-5 6-5 6-6
6.3	GESTATION COMPLICATIONS Sick Gilt/Sow Discharge Abortion	6-6 6-6 6-7
6.4	FARROWING Pre-Farrowing Preparation. Farrowing. Post-Farrowing Sow Care.	6-7 6-7 6-8 6-10
6.5	FARROWING & POST-FARROWING COMPLICATIONS.  Dystocia/Labour Difficulty.  Prolapses  Mastitis or Agalactia "No Milk"  Savaging Piglets  Laid On Piglets	6-10 6-10 6-11 6-12 6-13
6.6	SOW LACTATION	6-13
6.7	PIGLETS DAYS 1 TO 4  Colostrum  Iron  Processing  Piglet Behaviour.  Fostering  Environment	6-14 6-14 6-15 6-16 6-17



6.8	DAYS 4 TO WEANING (AT DAYS 21 TO 50).  Piglet Behaviour.  Creep Feed.  Weaning.	6-18 6-18 6-18
6.9	WEANER TO GROWER  Pig Behaviour  Feeding  Environment	6-19 6-19 6-20 6-20
6.10	GROWER TO FINISH  Pig Behaviour  Feeding  Environment	6-21 6-21 6-21 6-21
6.11	GETTING READY FOR MARKET	6-22
6.12	RAISING BREEDING ANIMALS	
SEC.	TION 7: SWINE HEALTH	
7.1	HERD HEALTH	7-1
7.2	HERD HEALTH EXAM	7-2
7.3	PIGS – IDENTIFYING NORMAL VS. ABNORMAL	7-5
7.4	DISEASE SPREAD	7-8
7.5	PUBLIC HEALTH	7-9
7.6	REPORTABLE DISEASES & FOREIGN ANIMAL DISEASES	7-12
7.7	COMMON DISEASES OF OUTDOOR PIGS	7-19
7.8	DISEASE MANAGEMENT	7-23
7.9	VETERINARY DIAGNOSTICS	7-31
SEC.	TION 8: BIOSECURITY	
8.1	WHAT IS BIOSECURITY?	8-1
8.2	WHY IS BIOSECURITY IMPORTANT?	8-2
8.3	BIOSECURITY ON YOUR FARM  Farm Layout  Fencing & Signs  Cleaning & Disinfecting  Visitors	8-3 8-3 8-7 8-7



	Sourcing Animals – Auction Marts. Quarantine. Disease Surveillance Trailers. Feed & Water. Other Animals Manure Management. DeadStock Handling & Disposal	8-9 8-10 8-10 8-11 8-13
SEC	TION 9: WILD & FERAL PIGS IN CANADA	
9.1	WILD & FERAL PIGS IN CANADA  WHAT is the risk?  WHAT are wild pigs?  WHY are they a concern?  WHERE are wild pigs?	9-1 9-1 9-2 9-3 9-4
9.2	WHAT ARE THE DISEASE CONCERNS RELATED TO WILD PIGS?	9-6
<ul><li>9.3</li><li>9.4</li></ul>	WHAT IS THE FINANCIAL COST OF WILD PIGS?  WHAT is being done to control wild pigs in Canada?.  WHERE to report wild pig sightings in B.C.?  WHAT CAN I DO TO PROTECT MY PIGS & THE CANADIAN HERD FROM WILD PIGS?	9-6 9-7 9-7
		9-0
	TION 10: MARKETING HOGS  SLAUGHTER PLANT BIOSECURITY	10-3
10.1	WHEN IS MY PIG READY FOR MARKET?	10-3
10.2	SLAUGHTER PLANT CLASSES/LICENCES	10-4
10.5	SLAUGHTER PLANT PREPARATION	10-6
10.5	FOOD SAFETY	10-9
	EMERGENCY EUTHANASIA	10-13
10.7	ATTAINING REGISTERED COMMERCIAL PRODUCER STATUS IN B.C	10-14
SEC	TION 11: TRANSPORTING PIGS	
11.1	TRANSPORTATION BASICS	11-1
11.2	TRANSPORT BIOSECURITY	11-4
11.3	FIT TO TRANSPORT	11-6
114	FEDERAL TRANSPORT REGULATIONS	11-9



SEC.	TION 12: HUMANE EUTHANASIA	
12.1	EUTHANASIA PLAN	12-1
12.2	DECIDING TO EUTHANIZE	12-2
12.3	METHODS OF EUTHANASIA	12-5
12.4	HOW TO EUTHANIZE PIGS	12-6
12.5	CONFIRMATION OF DEATH	12-8
12.6	DISPOSAL OF DEADSTOCK	12-10
SEC	TION 13: EMERGENCY MANAGEMENT	
13.1	FARM HAZARDS – EMERGENCY PLANNING	13-1
13.2	SERIOUS ANIMAL DISEASE OUTBREAK – EMERGENCY PLANNING	13-3 13-4
13.3	SERIOUS ANIMAL DISEASE OUTBREAK: WHAT SHOULD I DO?	
13.4	EMERGENCY PREPAREDNESS TIPS – ALL EMERGENCIES	13-7
13.5	EMERGENCY MANAGEMENT FOR AGRICULTURE IN B.C	13-8
REF	ERENCES	

