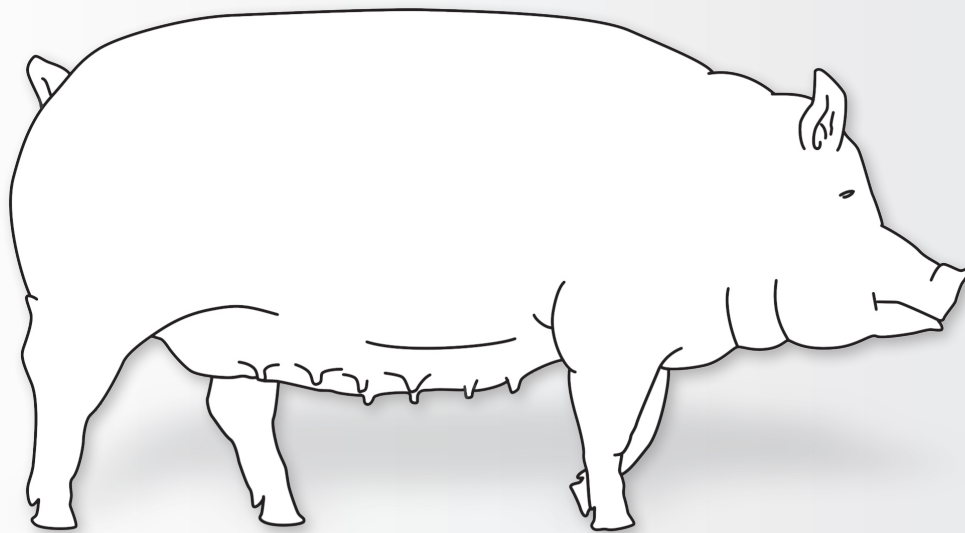


4-H Swine Leader's Guide



Ministry of
Agriculture



Publication #1335
Version 08/08

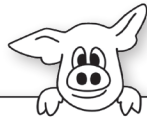


Table of Contents



Introduction	1
4-H Program Objectives	2
4-H Swine Project Objectives.....	2
4-H Achievement.....	3
Swine Project Options.....	3
Swine Project Awards	6
Teaching Techniques	7
You – The Club Leader.....	7
How to Teach.....	8
Teaching Suggestions.....	9
Welcome to the 4-H Swine Club.....	12
History and Project Selection	14
Picking your Pig.....	16
Pig Parts!	17
Identify the Parts	18
Feeding and Nutrition	22
What is in Feed Anyway?.....	23
Exploring the Digestive System.....	24
Points for Discussion.....	24
Facilities	25
Designing Facilities	26
In a Pig’s Eye.....	27
Biosecurity Quiz	28
Husbandry and Health	32
Creed of the 4-H Stockkeeper.....	33
Caring for My Animal	35
The Good, the Bad and the Ugly Game.....	36
Pig Observations.....	40
Examining a Healthy Pig	41
Pig Examination Chart	41
Some Rules for Injecting Pigs	42

Swine Reproduction and Breeding	44
Understanding Breeding Systems.....	46
The Cycle!.....	47
Design your Farrowing Area!.....	48
Fitting and Showing	49
Preparing for the Show!.....	50
Challenge your Members!	51
Decisions, Decisions, Decisions.....	52
Marketing	53
Exploring a Meat Counter	54
Pork Products!	55
Saying Good-Bye	56
Glossary Activities	58
Conducting A Swine Trivia Contest!!	59
Junior Proficiency	60
Quick Facts on Senior Projects	62
Resource List	64





It has often been said that volunteer 4-H leaders are a blend of friend and teacher. What a big order to fill! But you will discover that you have many talents as a 4-H leader. Having an interest in young people and their development and taking up the challenge of 4-H leadership is the first step to success. Thank you for volunteering your time to be a BC 4-H Swine Project leader.

The role of the swine project leader is to:

- Help 4-H members learn about raising and managing swine.
- Introduce members to the 4-H swine project materials and other swine resources.
- Work with members to complete 4-H Achievement requirements.
- Encourage members to work towards earning 4-H Project Awards (see 4-H Award Opportunities Guide, Publication #128).
 - » Junior Badges
 - » Junior Proficiency Certificate
 - » Senior Skill Certificates
 - » Project Pin
 - » Honour Pin
- Provide information on various swine project options.
- Promote personal development opportunities in 4-H (communications, community projects, conferences, camps).

As a 4-H swine project leader, you will wish to know and help teach:

- The overall objectives of the BC 4-H Program
- The general objectives of the BC 4-H Swine Project



4-H Program Objectives

The BC 4-H program develops 4-H members in such a way that they become effective and responsible members of society. BC 4-H project work and programs are designed to help members:

- Increase their knowledge and develop skills in subject matter areas which are of interest and value to them.
- Acquire a positive attitude towards learning and develop the ability to make wise decisions.
- Learn how to work effectively in groups.
- Enlarge their horizons by participating in new experiences.
- Acquire a responsible attitude toward community service.
- Develop physically through healthful living and active recreation.
- Develop as responsible members of society.

4-H Swine Project Objectives

- To develop pride and responsibility associated with owning animals.
- To acquire an understanding of swine breeding, production and management practices, and acquire skill in executing them by owning, caring for and keeping records of swine.
- To develop skill, patience and understanding in handling animals.
- To increase knowledge of safety precautions for man and animals.
- To acquire an understanding of the economics of the swine industry and develop decision-making skills.
- To be able to identify the wholesale and retail cuts of pork, desired carcass characteristics, and understand the importance of swine in human nutrition.
- To acquire an understanding of livestock marketing.
- To develop an understanding of science and scientific research and its value to the swine and meat industry.
- To earn money and learn how to use it effectively.



4-H Achievement

Achievement certificates are awarded on the basis of work done by the club member throughout the entire year. To earn an Achievement certificate a 4-H member must satisfactorily complete the following:

1. Management of the Project
 - An inspection by club leader and/or designated person to determine the manner in which the project work is progressing
 - See the 4-H Livestock Husbandry Score Card, Publication #140(C), for guidelines on evaluating project management
2. Completion of the Project
 - A member must exhibit his/her completed project at Achievement Day.
 - See the 4-H Showmanship Score Card, Publication #148(R) for suggestions on evaluating 4-H project completion at Achievement Day.
 - Leaders may make alternate achievement arrangements for members enrolled in Senior Management projects or those with extenuating circumstances.
3. Completion of Record Book
 - A member must complete a project record book and turn it in to a club leader.

4-H members may earn Achievement for each unit they are enrolled in during any given year providing they complete the Achievement requirements of each unit individually.

Members enrolled in Senior Management, Junior Leader, or Self Determined Projects earn project specific certificates rather than Achievement Certificates.

Swine Project Options

Please refer to the 4-H Swine Project Regulations (Publication #1308).

4-H members may enrol in a maximum of four units per year.

Unit I – Fed Hog

- This project is designed for junior members and older members with little swine experience.
- The objectives are to have members learn about the responsibility involved in caring for animals, develop patience through working with a 4-H hog, and learn about marketing a 4-H project animal.
- Hogs in this unit should be exhibited at Achievement Day.
- Records for this project should cover a period of 3 months.



Unit II – Breeding Gilt

- This project is designed for members who wish to gain more experience in the practical aspects of swine production.
- The objectives are to have members learn about the responsibility involved in caring for animals, develop patience through working with a 4-H gilt, and increase their understanding of the qualities desired in breeding stock.
- The breeding gilt may be retained as a yearling sow and/or sow and litter.
- The breeding gilt project may be a good option for members who do not want to sell their project at the end of the year.
- Gilts in this project should be exhibited at Achievement Day.
- Records for this project should cover a period of 3 months.

Unit III – Yearling Sow

- This project is an extension of the breeding gilt project. The breeding gilt cared for in the previous project year should be retained and exhibited as a yearling.
- The objectives are to learn about selection of breeding stock, nutrition, feeding methods, housing and handling facilities, and safety.
- Sows enrolled in this unit should be exhibited at Achievement Day.
- Complete feeding records for this project must cover a period of at least 3 months. The record book should also reflect member involvement as a continuation of the previous year's project.

Unit IV – Two Year Old Sow

- This project is an extension of the yearling sow project. The sow cared for in the previous project year should be retained and exhibited as a two year old.
- The objectives are to learn about selection of breeding stock, nutrition, feeding methods, housing and handling facilities, and safety.
- Sows enrolled in this unit should be exhibited at Achievement Day.
- Complete feeding records for this project must cover a period of at least 3 months. The record book should also reflect member involvement as a continuation of the previous year's project.



Unit V – Feeder Hog Project (Senior Management)

- This project is for the senior member who intends to become, or is presently involved in commercial swine production.
- Objectives are for members to select, handle, feed and market at least 6 feeder hogs.
- This unit is considered a Senior Management Project, which requires approval and must be evaluated by Youth and Community Development Staff.
- Project may be exhibited at Achievement Day or be evaluated at the member's home. Detailed record keeping is expected to be an integral part of this project. Members may use the Livestock Senior Management Record Book (Publication #411).
- Records must be kept for 12 months. Project may include a research component to fulfill the 12 month time requirement.

Unit VI – Sow and Litter Project (Senior Management)

- This project is an extension of the yearling and two year old sow projects. The yearling and two year old sow cared for in previous years should be retained and exhibited as part of the swine herd.
- Objectives are to learn about care and management of the breeding herd, including control of insect pests and diseases. The member is to select, handle, feed and farrow at least 3 sows.
- This unit is considered a Senior Management Project, which requires approval and must be evaluated by Youth and Community Development Staff.
- Project may be exhibited at Achievement Day or be evaluated at the member's home. Detailed record keeping is expected to be an integral part of this project. Members may use the Livestock Senior Management Record Book (Publication #411).
- Records must be kept for 12 months. Project may include a research component to fulfill the 12 month time requirement.

Unit VII – Market Hog

- This project is for senior members who wish to gain further insight into the selection and marketing of a carcass animal.
- Objectives are for members to learn live animal evaluation to determine muscling and finish, objectives and requirements for hog carcass grading, and comparison skills to relate live animal evaluation to actual carcass merit.
- Hogs in the unit should be exhibited at Achievement Day separately or combined with fed hogs. To complete Achievement members must personally inspect the hog carcass after it has been slaughtered and graded.
- Records for this project should cover a period of 3 months and should include information on carcass grading.



Unit VIII – Senior Management

This project is for senior 4-H members interested in challenging themselves to learn about a new aspect of the swine industry.

- Objectives are for members to do research and/or carry out a project of their choice.
- This unit is considered a Senior Management Project, which requires approval and must be evaluated by Youth and Community Development Staff.
- Depending on the nature of the project it may be exhibited or evaluated at the member's home. Detailed record keeping is expected to be an integral part of this project. Members may use the Livestock Senior Management Record Book (Publication #411).
- Records must be kept for 10 to 12 months. Project may include a research component to fulfill the 10 to 12 month time requirement.
- Possible projects include:
 - » Swine housing systems
 - » Feed comparisons trial
 - » Marketing of pigs and pork
 - » An evaluation of careers in the swine industry through summer jobs and job shadowing
 - » A study on the effects of slaughterhouse facilities on meat quality
 - » The various cuts of pork and how to cut them
 - » Study of the swine price cycle
 - » Study of artificial insemination

Swine Project Awards

4-H members may earn the following project awards:

Junior Swine badges

- Husbandry
- Judging
- Showmanship

Senior Skill Certificates

- Husbandry
- Judging
- Showmanship
- Feeding
- Marketing

See the 4-H Awards Opportunities Guide (Publication #128) for details.





How to Use this Guide

The purpose of this leader's guide is to aid and guide the leader in teaching the material in the swine project. As a leader you should understand the material you are trying to present before attempting to teach it to club members. Use the member manual (Publication # 1330), other swine resources, and www.infobasket.gov.bc.ca for references.

This guide should be used as just that, a guide. Feel free to adjust the activities or create your own. Every club is different so you will need to use your judgement to provide your members with the best training possible. When deciding on activities and teaching techniques, consider the age of your members and how experienced they are with their animals. Even if the majority of your club members are experienced seniors, be sure to provide adequate instruction and help to your newest, youngest and shyest members.

If you have a large number of experienced senior members in your club, you may want to consider recruiting them to teach skills to the younger members. This could be done through a Junior Leader project or through one-on-one mentoring. From their own experience, they can provide topics and techniques to help less experienced 4-H'ers overcome shyness. Junior Leader projects provide an outstanding learning and development opportunity for the senior member and the members they are working with.

Be sure to take advantage of the swine worksheets and activities in this guide. If you find other activities and lesson plans along the way be sure to share them with other leaders. Networking among 4-H leaders is a valuable way to tap into years of experience.

Remember 4-H can be fun for members, but also for you too!

You – The Club Leader

As a Friend and Counsellor

You are the 4-H member's friend who is close by when the member wants advice or help.

A successful leader is the person who has the confidence of the group; keeps ahead of them yet seems always with them; understands their viewpoint; is tolerant, patient, and sympathetic in working with them. They recognize work well done in such a way that young people will be encouraged to do even better; make friendly suggestions instead of displaying authority; and provide situations that will afford them larger responsibilities as they become more experienced.



You do not have to do the job without help. There are others in your community who will be glad to assist. In addition, older 4-H members can serve as assistants and junior leaders. They can assist in many ways and they will grow through the experience. If you enjoy working with young people and have an interest in swine, you will find the time spent working with the 4-H swine program most rewarding. You will find great satisfaction in watching boys and girls develop their knowledge and skills. As a leader, you will find that getting to know each boy and girl will help you guide them as they gain confidence in working with a group.

As a Teacher

As a leader you will be concerned with teaching subjects that deal with swine production and marketing as they apply to the 4-H swine program. You will also be working with the members and introducing ideas dealing with personal development.

What Do You Teach?

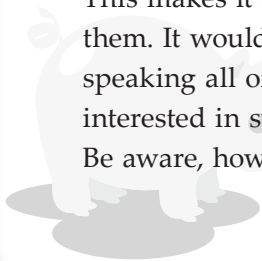
Review the objectives of the 4-H swine program, use the 4-H member's swine manual for specific ideas, and www.infobasket.gov.bc.ca. These tools combined with your own knowledge of the swine industry will give you a base to start on. As you become acquainted with your members and visit their farms you will find problem areas that you may wish to improve. A good teacher is objective. There may be special interests or biases, but keep these out of teaching.

How to Teach

Within your club, learning may take place in many different ways. Regular club meetings, special instructional meetings, or club field trips all provide opportunities for learning. Whatever the teaching situation, the basic teaching methods that can be used are these:

- *Discussions and debates* – panel, group discussions.
- *Demonstrations* with you and/or a member(s) present giving the material.
- *Workshops* – i.e. budgeting a swine program, balancing rations, summarizing and analyzing records.
- *Movies or educational videos* – if good and up-to-date.
- *Talks by special resource people* such as a Nutritionist for a feed company, a Veterinarian, your local District Agrologist or Agricultural Representative.
- *Field trips* to farms, businesses or organizations.

It is effective to use a variety of methods in the course of a year or even in a single meeting. This makes it more interesting to members and, therefore, you will accomplish more with them. It would be a mistake to have all movies, all outside speakers or to just listen to you speaking all of the time. Do not be hesitant about teaching. If you like young people and are interested in swine, you undoubtedly have plenty of knowledge to share with 4-H members. Be aware, however, of the numerous resources within your club and your community.



Teaching Suggestions

To be a good 4-H leader you must first understand young people and have the ability to stimulate their interest and enthusiasm. It is important that you yourself be interested and enthusiastic about the subject you are teaching.

Important! It is not required that you, as the club leader, know or teach all the aspects of animal ownership covered in this project. Try to identify as many people as possible in your club or community who have knowledge of skills in certain areas and invite them to lead each section with some direction from you.

You should read the sections on “Working With Young People” and “Managing A 4-H Project” in the 4-H Club Leader’s Handbook. In addition to these, the suggested teaching plan in this guide will give some assistance in setting up a program.

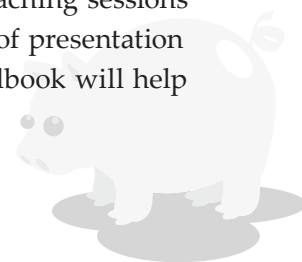
Evaluation is an important part of your teaching program. It allows you to see how well the material you are presenting is being absorbed, and whether you are getting your point across to the members.

Some Principles of Good Instruction

1. Set clear goals and know what you are trying to accomplish in each lesson. Be prepared.
2. Be simple, clear and definite as you can. Avoid too much talk.
3. Use correct terms relating to the animal.
4. Be firm but sympathetic. Be patient and quiet, especially with nervous members. Be natural. Avoid sarcasm as this can lead to a negative attitude in your club.
5. Keep up interest by keeping members active.
6. Encourage members with praise when it is deserved, especially with younger members. Do not play favourites.
7. Set an example. If you have animals, then you and your animals must be well turned out.
8. A good lesson should be:

Hearing (explanation)	5 minutes
Seeing (demonstration)	10 minutes
Feeling (practice)	15 minutes

Especially in clubs with young members, holding their attention during teaching sessions is often a problem. This can be solved to a large extent by using a variety of presentation methods. Several methods are suggested below and the 4-H Leader’s Handbook will help as well.



Methods of Instruction

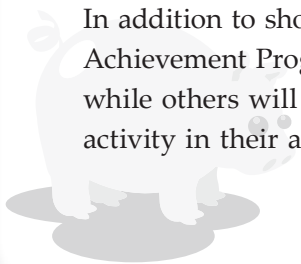
1. *Demonstration* – should be part of every lesson.
“The eye is the window to the brain”.
2. *Lecture* – should be kept short (20 minutes followed by questions and discussion to be sure the information is understood).
3. *Reading* – have members read manuals or reference materials ahead of time.
4. *Quizzes* – can be useful, but remember to use them as indicators of amount learned rather than for competition between members.
5. *Peer Presentations* – have the members prepare talks on various subjects from the manual. Several members may work together on a presentation. As an alternative, members may choose to read reference books on topics of interest and prepare talks to be given at club meetings. These talks should be time-limited and kept fairly short.
6. *Small Group Activity* – This method involves practical exercise for small groups of members. Small group activity emphasizes discussion and interchange of ideas not only between members and leaders but also among members themselves.
7. *Think-Pair-Share* – easy to use on the spur of the moment. Announce a discussion topic or problem to solve. Give members at least 10 seconds of think time to THINK of their own answer. Ask members to PAIR with a partner to discuss the topic or solution.
Finally, randomly call on a few members to SHARE their ideas with the group.

Remember. . . “Learn to do by doing”!

Achievement Program

The Achievement Program is an opportunity for members to share the knowledge and skills they have gained during their 4-H project year. It should also inform the public about the purpose and goals of the 4-H program. Achievement Program ideas specific to this project are suggested below. Involve club members in selecting a suitable idea and making the necessary preparations; each member should be involved in some way.

In addition to showing their swine, members could plan an activity to go along with their Achievement Program. Some clubs will have their Achievement Program during the local fair, while others will want to put on a separate event, such as during an agricultural awareness activity in their area or in conjunction with another 4-H event.



Some suggestions:

1. Members display their animals at a 4-H Achievement Program. They should be encouraged to prepare a sign giving as much information on the breeds and health of the animal as possible. Such a sign could include sex, age, feeding requirements, history of the breed, or other related topics. These displays could be done individually or as a group, depending on the number of animals, display space available and the suitability of the event.
2. Members could demonstrate the fine points of showing and an explanation of the judge's choices with judging and a ringside commentary.
3. Designate some members as Information Officers and prepare some material for them to hand out to the crowd as it views the 4-H displays or show. Another way to draw people to the display is to have a running commentary delivered by a 4-H member with a microphone on the local club, its projects and the display.
4. Participate in an agricultural event or a mall display. The club could set up a display and have members available to answer questions about some aspect of 4-H. This display could include basic information on the multiple uses of project animals.

For more information on Achievement consult your BC 4-H Leader Handbook.

Special Notes For This Project

1. The Members' Manual has been designed as a reference source. Encourage members to leave their manuals closed for most of the meeting, allowing them to observe, learn and take part in the discussion and other activities. It is **not necessary to read** all of the information given in the Members' Manual during the meeting.
2. You are free to change the order of material presented in the manual and the information in a manner which suits you.
3. Remember to refer to your 4-H Leaders' Handbook – You will find many useful tips and ideas covering topics such as program planning, successful meetings, parliamentary procedure, effective communication and presentation methods. Refer to your Leaders' Handbook as you plan meetings.
4. Judging tips could be an optional activity at your club meetings. The more your members learn how to judge, the better judges they will become. Each 4-H family should have a copy of the Livestock Judging Guide, (BC 4-H Publication #427).
5. Fitting and showing skills should start as soon as the member can work with their animal. Keep tabs on member progress. Some members may not have anyone at home to ask for help. It is a good idea to pair an experienced senior member with a junior member who could use some help or encouragement.
6. There are meeting activities, meeting mixers and extra topics for discussion that have been listed in this guide. They provide greater detail and information and should be used as a resource for meeting presentations.



Welcome to the 4-H Swine Club

Welcome to 4-H!

Greet old and new members with a game! As each member arrives, pin on his/her back a piece of paper with the name of a breed on it. Each person must guess the name by asking others questions that can only be answered with YES or NO. When a member has correctly guessed the breed, move the tag to the front.

Getting Started

1. Begin with the 4-H pledge (make sure new members have a copy to look at).
2. Welcome the members. Introduce leaders and have members introduce themselves. Ensure that everyone has a nametag (optional).
3. Complete enrollment form information.
4. Outline the opportunities for the members such as taking part in the local fairs, district 4-H judging rally, public speaking, regional 4-H events and provincial 4-H programs.
5. Distribute the Members' Manual.
6. Give a brief summary of what the club is about and topics covered.
7. Discuss member unit requirements. Outline any expectations you have of the members.
8. Briefly discuss the Achievement requirements of your club.
9. Have some group games and social recreation for members to get acquainted.

Roll Call

At the beginning of each meeting have an easy question that all members can answer. Show an interest in the members and their responses. This encourages them to participate throughout the meeting.

Roadmap To Good Meetings

It is important for everyone to become familiar with the basics of running an effective meeting. Review with members the purpose of an agenda and the executive's responsibilities. Have the club members elect an executive. You should have a copy of Parliamentary Procedure (4-H Publication #1815) for your club. Also useful is the educational DVD, "Conquering the Scene Stealers: Running effective meetings", available from the BC 4-H Office.

The club president will chair the short business section at the beginning of each meeting. Helping members to understand and use the basics of running a meeting will help them to become familiar with the process.



Thanking The Meeting Host

If a meeting is to be held in a member's home or barn, that member and his or her parents should be appropriately thanked for their hospitality. A letter can be forwarded after the meeting or a simple verbal thank you from the group can be given. The president should designate a different member to take responsibility for this task each time.

Before The Next Meeting

To prevent dropping out, take time with each new member to make sure that he/she knows what is expected of him/her. Make them feel a part of the group and offer to help in any way.

CAUTION

Farm visitors can spread diseases within a farm and among farms. People spread contaminated material directly on footwear, hands and clothing. Farm families hosting a 4-H meeting should ask visitors to comply with certain precautions to protect their livestock. These may include the use of a sanitary foot bath or wearing plastic, disposable boots and clean coveralls. As a courtesy, 4-H members should arrive at the host farm with freshly laundered clothes and clean rubber boots. Upon returning home, 4-H members should change to different clothes and boots before entering their barn. Remember, some diseases are spread very easily. Animal welfare, pride in stockmanship and peace of mind are reasons to prevent spread of diseases in addition to the cost associated with a disease outbreak.

Activities and Worksheets

The following pages are some activities and worksheets to get you started on your club collection. You are encouraged to share and collect new ideas from other leaders and clubs. In this section if a title is in ***bold italics*** then it is an activity and it is not necessary for the members to have a copy. All other sheets are worksheets and you should make copies for use in your club. Some sheets and activities have strong links with certain topics in the manual, while others can be used for a variety of topics.

Photocopy what you intend to use and return it to the binder to be used again. It is up to you to choose the worksheets you want to use, if any. You may find that you have found different activities that you prefer. As you accumulate activities to use in your 4-H club be sure to share them with other leaders, the BC 4-H Office, and Youth and Community Development staff.

You do not have to use the worksheets as they are presented. Make any changes you like to your copy to suit you and your club members.



History and Project Selection

Objectives

To teach 4-H members about:

- The history of swine
- The swine industry in British Columbia
- Common breeds of swine in British Columbia
- Breeding systems
- Parts of the swine
- Project selection based on general conformation and breed specifications

Summary Questions

1. When is the best time to select a pig for the feeder pig project?
For the breeding project?
2. What additional points should be considered in choosing a breeding gilt rather than a feeder pig?
3. Name two characteristics of a pig which would keep it from being chosen for the breeding project while it might be quite satisfactory in the feeding project.
4. The brothers and sisters of a gilt might influence your selection of her as a breeding gilt. Explain.
5. State advantages of hog production over other livestock enterprises.



Suggested Activities

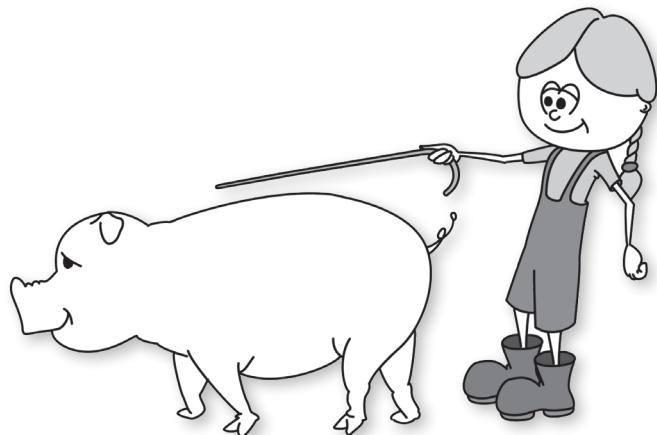
Selecting Your Swine

Contact a local swine producer and see if your club can come and look at a group of feeder pigs. Keep in mind the producer may request your club undertake certain biosecurity measures. He or she is just trying to keep their animals healthy. If possible, try to take a video record of your club's visit. Get the members to look at the different pigs and compare the animals to what they would look for in a potential project pig. Get them to take note of the identification of any animals they saw as excellent potential project animals, and those animals they thought would not be suitable. Ask the producer if your club can return before the animals are sold so they can see how well they predicted their animal's outcome.

Another way to accomplish an activity for project selection is to hold a mock judging event. Have the members choose the best animal out of a group and explain why. In addition, use a good and poor animal, and compare the different parts of the body.

Breed Identification

For fairs and achievement day, have each member make a poster of each of the breeds with information and pictures of the breed. To keep the posters for more than one event, have them laminated before the fair.



Picking your Pig

Can you answer these questions on project selection?

1. What did you learn about buying feeder pigs?
2. What did you look for when selecting a feeder pig?
3. Why is it important to consider several points before making a decision?
4. Why is the price not always the most important factor to consider when making a purchase?
5. When have you had to make decisions about purchasing things other than pigs?
6. What made you decide? How did you decide?
7. Why is gathering good information important before making a decision?
8. Why is taking time to decide important?
9. What factors are important to you in making a decision?



Pig Parts!

Find the words below to reveal the hidden message.

I T I S F U N T O R A I S E S A N D L E S A R N A B O U T S
W I N E L M S H L H X Y Z O T N T V F H N N J K V M G M N P
F O R E J D T O Z U H O J E C T O F O G F R X J F R B L Q E
T E Q E D M D H E A R T G I R T H U B A C K E D M A L O J X
K D X O C T A U Y Z C E V S D M L V T C E C Y X J Y C P U J
G E X F H Z G H T A Y F Q M P D M L M W K D O G G J J E K L
B W E O H Y G N L U U S O Q E C S Z E M W W R T B P X C Y F
L K I H J F O V J D G R M R H W Y L B T Z M S Q Y F F I Q B
C R W U C W T R J L K Z A Y T O O S J B A O J O J I W A R P
P H M T D G E C U D C S G H J V H L E Y L B H H M S K E I B
B K M K A V M W L K N T W Y P E W T C A C P J Y O T L M Y Z
Z G Q Z W N D K R B Z A A S M O M P D Y H P M U R O U I Q Q
Q W B K H K R C V W G R L Y J H T A E I T W A H N E W R W Q
E C R H D M C E D I A E C H M B V N F G W A I O S C Y G B A
P I C H B O P E T I K G W V H Z I M I A B B I D F A S T U C
G A S Q Y U K T N S V P E W A L M R C R N U O L P N J O M I
O I O T G K E E L F A T D P R V B L B A E M D E I P D L Z H
F H J T I P U G G U I P M E E J B L F E R A W Z N G Y R V L
R L F L C F I K O D N L D Z G Z U A B R C D G A L O V Z O E
Y U A D Y M L B E N X N M T P T D Q L R D Q S L N S H U J O
T R O N T P W E W W U M U O O M W H J L H J K V N T L N K N
Z R W J K Y I N Q N R J U H Y G M K C I A O I L P O M P L I
N S J U P J J I T W W W C A E W O R G T V L X K C O H L V U
D B O M T J E B X S E E I F M E W B U Y O U Y I W R U R G H
S Y Y B B B C K E P D O V L K Q H D J W N R D S A O N I K J
U O N Q K F Y T B Y Y M V V Z F E J Y I O P C L J Q S B U Y
Q C K I N Y Z Q E X X S L X S D D F T L D S K J W C P Y W H
R A Z B E J F C Y E R G H B N P U B H C Z O T B G M W D Y Z
C O Q E E W O A G J C N U Q S R L R Y I P A P K O R L U V V
I K T J E O F H Q T X L R M N P N H I R X I B J M V Y S Q D

BACK CHEEK CROTCH DEWCLAW FACE FLANK FORE HAM
HEARTGIRTH HOCK JOWL PASTER N SHOULDER SNOUT
KNEE NECK REAR RUMP TAIL STIFLE UNDERLINE WIDTH

Do you know what the hidden message is?



Identify the Parts

Activity

Have the members review the swine parts diagram in their member manual. Their objective with this will be to name the external parts of the swine on a blank diagram or on a live hog. Give them 15 minutes to review their diagram, you as the leader can make up a larger version that does not have the labels and let them try to label the diagram correctly. This body part review should continue throughout the process of learning about swine at any level. This type of diagram can also be useful as an interactive event at fairs where the public can give it a try.

Supplies:

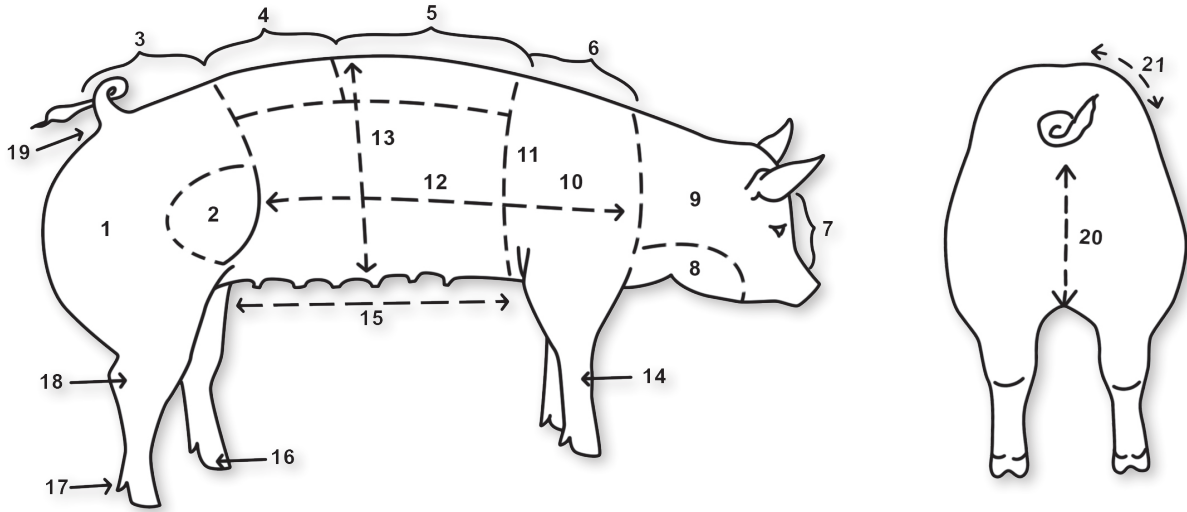
- Bristol board
- Marker
- Clear Mack Tack – makes a great inexpensive protector for your diagram and will help extend its use.
- Removable Tape – to put answers on with, cover these with mack tack to protect them too.

After 15 minutes use an unlabeled diagram and have the members place the proper terms on the diagram.

After a few weeks of learning about the swine parts, present a blank picture and worksheet so the members can practice filling in the blanks.



Identify the Parts



_____ a. Depth of Seam
or Crotch

_____ b. Knee

_____ c. Shoulder Blade

_____ d. Tail Setting

_____ e. Heart Girth

_____ f. Ham

_____ g. Dew Claw

_____ h. Pastern

_____ i. Stifle Region
of Ham

_____ j. Rump

_____ k. Turn Over
Loin Edge

_____ l. Neck

_____ m. Underline

_____ n. Face

_____ o. Length of Side

_____ p. Hock

_____ q. Back

_____ r. Jowl

_____ s. Shoulders

_____ t. Depth of Side

_____ u. Loin



Pig Parts! – Answer Key

Find the words below to reveal the hidden message.

IT IS FUN TO RAISE SANDLES A RN ABOUTS
 WINE LMSHLXYZOTNTVFHNNJKVMGMNP
 FORE J D TO Z U H O J E C T O F O G F R X J F R B L Q E
 T E Q E D M D H E A R T G I R T H U B A C K E D M A L O J X
 K D X O C T A U Y Z C E V S D M L V D C E C Y X J Y C P U J
 G E X F H Z G H T A Y F Q M P D M L M W K D O G G J J E K L
 B W E O H Y G N L U U S O Q E C S Z E M W W R T B P X C Y F
 L K I H I F O V J D G R M R H W Y L B T Z M S Q Y F F I Q B
 C R W U O W T R J L K Z A Y T O O S J B A O J O J I W A R P
 P H M T D G E C U D C S G H J V H L E Y L B H H M S K E I B
 B K M K A V M W L K N T W Y P E W T C A C P J Y O T L M Y Z
 Z G Q Z W N D K R B Z A A S M O M P D Y H P M U R O U I Q Q
 Q W B K H K R C V W G R L Y J H T A E I F W A H N E W R W Q
 E C R H D M C E D I A E C H M B V N F G W A I O S C Y G B A
 P I C H B O P E T I K G W V H Z I M I A B B I D F A S T U C
 G A S Q Y U K T N S V P E W A L M R C R N U Q L P N J O M I
 O I O T G K E E L F A T D P R V B L B A E M D E I P D L Z H
 F H J T I P U G G U I R M E E J B L F E R A W Z N G Y R V L
 R L F L C F I K O D N L D Z G Z U A B R C D G A L O V Z O E
 Y U A D Y M L B E N X N M T P T D Q L R D Q S L N S H U J O
 T R O N T P W E W W U M U O O M W H J L H J K V N T L N K N
 Z R W J K Y I N Q N R J U H Y G M K C I A O I L P O M P L I
 N S J U P J J I T W W W C A E W O R G T V L X K C O H L V U
 D B O M T J E B X S E E I F M E W B U Y O U Y I W R U R G H
 S Y Y B B B C K E P D O V L K Q H D J W N R D S A O N I K J
 U O N Q R F Y T B Y Y M V V Z F E J Y I O P C L J Q S B U Y
 Q C K I N Y Z Q E X X S L X S D D F T L D S K J W C P Y W H
 R A Z B E J F C Y E R G H B N P U B H C Z O T B G M W D Y Z
 C O Q E E W O A G J C N U Q S R L R Y I P A P K O R L U V V
 I K T J E O F H Q T X L R M N P N H I R X I B J M V Y S Q D

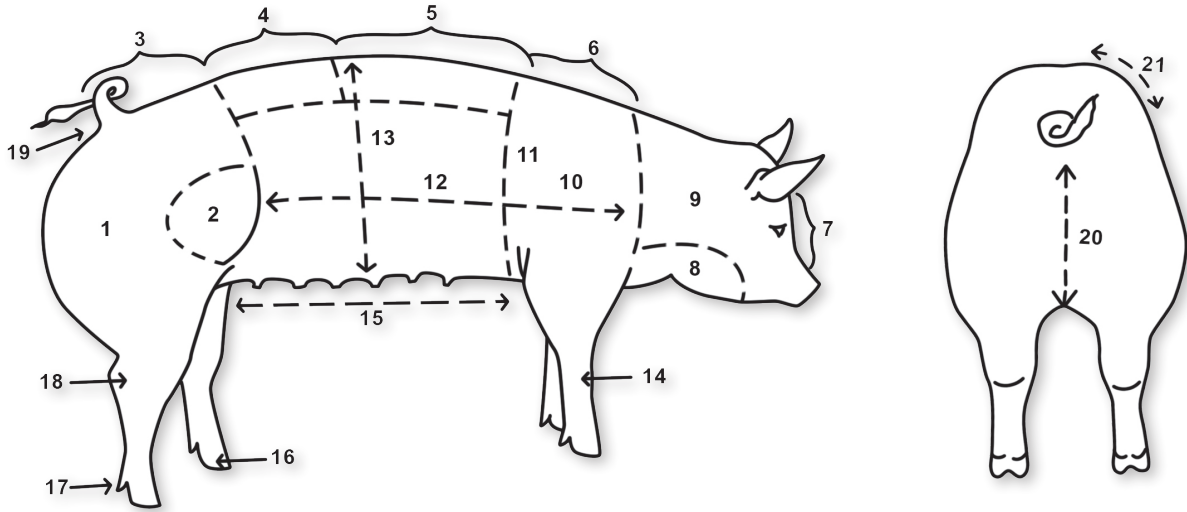
BACK CHEEK CROTCH DEWCLAW FACE FLANK FORE HAM
 HEARTGIRTH HOCK JOWL PASTER N SHOULDER SNOUT
 KNEE NECK REAR RUMP TAIL STIFLE UNDERLINE WIDTH



Do you know what the hidden message is?

IT IS FUN TO RAISE AND
 LEARN ABOUT SWINE

Identify the Parts – Answer Key



20 a. Depth of Seam
or Crotch

16 h. Pastern

12 o. Length of Side

14 b. Knee

2 i. Stifle Region
of Ham

18 p. Hock

10 c. Shoulder Blade

3 j. Rump

5 q. Back

19 d. Tail Setting

21 k. Turn Over
Loin Edge

8 r. Jowl

11 e. Heart Girth

9 l. Neck

6 s. Shoulders

1 f. Ham

15 m. Underline

13 t. Depth of Side

17 g. Dew Claw

7 n. Face

4 u. Loin





Objectives

To teach 4-H members about:

- Nutrients and their uses
- Breakdown of what is in feed
- Methods of feeding
- Different types of swine diets
- The swine digestive system

Summary Questions

1. Name the nutrients important to all animals and describe how they are utilized in the pig's body.
2. What vitamins should be added to grains when pigs are housed inside? What vitamins should be provided when pigs are outside on good pasture?
3. Name the minerals that need to be added to grains. What are their sources?
4. What are the differences between these three feeding methods: self-feeding, restricted feeding and liquid feeding?
5. List the benefits derived from including an antibiotic supplement in the ration.

Suggested Activities

Feed Identification

Collect samples of feed common in your area. Allow the members to handle the feed samples and try to identify them. If many club members are feeding a grain pre-mix, have them bring in a sample and a list of ingredients. Challenge members to identify the components of the pre-mix by comparing with the individual feed sample. Senior members could be challenged to compare between various feeds for effectiveness and cost efficiency.

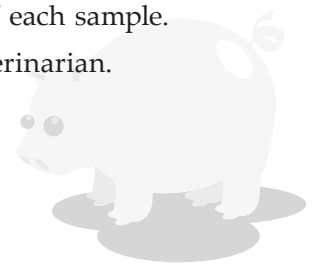
In addition to these exercises, demonstrate how to weigh the amount of feed at a feeding. Use different types of feed to show how the difference in weights affects the quantity of feed.

Supplement Samples

- Show samples of protein and mineral supplements. Explain the use of each sample.
- Borrow samples of vitamin and antibiotic supplements from your veterinarian. Explain the use of each sample.

Building a Self-Watering Device

How to make a self-watering device for pigs.



What is in Feed Anyway?

Use the tag of a bag of feed to complete the chart below. Indicate the nutrient that each provides in the ration and what that nutrient does for the animal.

Feed Ingredient	Nutrients Provided	What the Nutrient Does

Exploring the Digestive System

Pigs are monogastrics, like humans. This means that they have a relatively simple digestive system. Find a description and picture of a pig's digestive system. Using coloured pencils draw the digestive system of the swine, labelling and colouring all of the parts.

Points for Discussion

How is the digestive system of a pig different than that of a cow or a sheep? Does that affect the food they eat?

Did you learn anything about the human digestive system when you were researching the swine system?





Objectives

To teach 4-H members about:

- How to keep pigs comfortable
- Ventilation in a barn
- Different types of swine housing
- Environmental stewardship
- Biosecurity

Summary Questions

1. Name 5 symptoms a pig will demonstrate if the temperature is not at the correct level for their age.
2. When planning to build a swine barn, name some of the important considerations that you need to make to ensure the animals' health and safety.
3. How do you clean your pig pen? Why should a pen be cleaned before using?
4. Describe a feeder barn that you have seen. What improvement could you offer?
5. What measures can a swine producer take to make sure they are being a good steward of the environment?
6. What does the term "all in all out" mean? Is it a form of biosecurity?

Suggested Activities

Field Trip!

Visit a large swine facility and learn about the facility design and layout. Look for different components, such as breeding, gestation, farrowing and nursery areas. Try to think about how the owner has taken pig comfort into consideration.

If you are unable to visit a facility, have a slideshow of pictures that explain the different areas and compare with pictures of a second operation.

Popsicle Stick Building Contest

Challenge your club members to build the perfect barn, feeder, creep feed or even an entire farm out of popsicle sticks. Have the members research, design and build the popsicle stick structures at home. Have the structures on display at the club meeting. Allow club members to explain their design to the rest of the club. You may wish to provide a prize for the individual who has the most well thought-out design.

Designing Facilities

Imagine you are going to receive your pig(s) in one month and you will raise it to market weight. You have to be sure that you will have a space that is properly laid out. It is a good idea to plan it out in advance. Your challenge is to draw the layout of your facility showing any changes to allow for growth or any breeding facilities that may be required. You may want to do some additional research on swine facilities and different options. If you are using any symbols, be sure to include a key.

Swine Online

Every day there is more and more information available on the internet. Your club members can help each other by making a list of useful websites that have to do with swine. It may even be a good idea to print off the information from really useful websites and make a reference book for your club. It can be made into a contest. Who can find the most up to date information on a particular topic? Who can find the most interesting pig fact? Who can find out about swine operations in other countries?

It is a good time to go over some basic internet facts with your members:

- Do not give out or send personal information such as your address, your phone number, where you go to school or photographs.
- Do not agree to meet people that you have met through the Internet until you check with your parents or guardian, and be sure that your parents or guardian attend the first couple of meetings with you.
- Do not respond to any messages that ask for personal information, messages that are mean or messages that make you feel uncomfortable.
- Talk to your parents about setting up some rules to ensure that your use of the Internet will be rewarding, fun and safe. Get your parents involved and show them how much fun the Internet can be.

Swine Website

www.infobasket.gov.bc.ca

Information on Site

Links to all sorts of useful information on swine and raising swine!



In a Pig's Eye

Go into your animal's space and spend a few minutes in there answering the following questions.

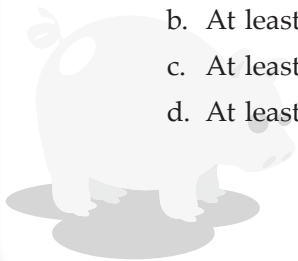
1. How would you describe the air quality in the stall at the animal's level?
2. How dry is the bedding area? If you kneel in the bedding area do your knees get damp?
3. Is the water source easily contaminated?
4. Are the sleeping, eating, and dunging areas separate?
5. Are there any easy escapes for your animal?



Biosecurity Quiz

Circle the correct answers to the following questions:

1. Animal Biosecurity means:
 - a. Keeping diseases out of animal populations where they do not already exist.
 - b. Protecting your animals from trespassers.
 - c. Monitoring animal feed and water supplies.
 - d. Locking the animals in your barn at night.
2. After returning from a livestock show you should keep the show animal away from the rest of your animals for how long?
 - a. A week.
 - b. At least two weeks.
 - c. A month.
 - d. A day.
3. You should do chores (feed, water, clean) for your animals in this order:
 - a. Sick to oldest to youngest.
 - b. Youngest to oldest to sick.
 - c. Oldest to sick to youngest.
 - d. Youngest to sick to oldest.
4. Separating sick animals from healthy animals means:
 - a. Fencing off an area in the barn, for sick animals to live in until recovery.
 - b. Keeping sick animals in a corner of the barn out of touching range of other animals.
 - c. Putting sick animals in a completely separate area than healthy animals.
 - d. Not letting sick animals share feed and water with healthy animals.
5. Avoiding sharing of grooming equipment and _____ can reduce the risk of your animals getting respiratory diseases from other animals.
 - a. Feed/water containers.
 - b. Shovels.
 - c. Needles.
 - d. Antibiotics.
6. How far away should an "isolation area" be from the main barn?
 - a. At least 100 feet.
 - b. At least 500 feet.
 - c. At least 700 feet.
 - d. At least 900 feet.



7. Feed should be delivered by:
 - a. A truck that goes to several other animal operations on the same day.
 - b. A driver who wears clean clothing each delivery.
 - c. A truck that goes to one farm, is disinfected, and goes to the next farm.
 - d. A truck and driver who are clean every day.
8. Vehicles can transmit diseases by:
 - a. Having manure stuck to the tires and vehicle frames.
 - b. Animals licking a truck that delivers to several different farms.
 - c. Having manure inside the cab of the truck.
 - d. Animals coughing on a truck that delivers to several farms.
9. Visitors on the farm should:
 - a. Wear clothing they brought with them.
 - b. Shower in and out of the animal facility.
 - c. Wear clothing given to them by the farm owner.
 - d. Not be allowed in at all.

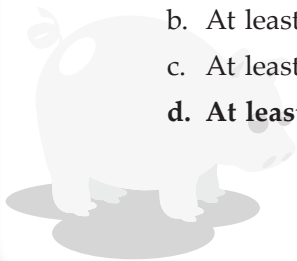
Special Thanks to 4-H Ontario for this Activity



Biosecurity Quiz – Answer Key

Circle the correct answers to the following questions: (the correct answers are highlighted)

1. Animal Biosecurity means:
 - a. **Keeping diseases out of animal populations where they do not already exist.**
 - b. Protecting your animals from trespassers.
 - c. Monitoring animal feed and water supplies.
 - d. Locking the animals in your barn at night.
2. After returning from a livestock show you should keep the show animal away from the rest of your animals for how long?
 - a. A week.
 - b. At least two weeks.
 - c. **A month.**
 - d. A day.
3. You should do chores (feed, water, clean) for your animals in this order:
 - a. Sick to oldest to youngest.
 - b. **Youngest to oldest to sick.**
 - c. Oldest to sick to youngest.
 - d. Youngest to sick to oldest.
4. Separating sick animals from healthy animals means:
 - a. Fencing off an area in the barn, for sick animals to live in until recovery.
 - b. Keeping sick animals in a corner of the barn out of touching range of other animals.
 - c. **Putting sick animals in a completely separate area than healthy animals.**
 - d. Not letting sick animals share feed and water with healthy animals.
5. Avoiding sharing of grooming equipment and _____ can reduce the risk of your animals getting respiratory diseases from other animals.
 - a. **Feed/water containers.**
 - b. Shovels.
 - c. Needles.
 - d. Antibiotics.
6. How far away should an “isolation area” be from the main barn?
 - a. At least 30 meters (100 feet).
 - b. At least 150 meters (500 feet).
 - c. At least 215 meters (700 feet)
 - d. **At least 275 meters (900 feet).**



7. Feed should be delivered by:
 - a. A truck that goes to several other animal operations on the same day.
 - b. A driver who wears clean clothing each delivery.
 - c. A truck that goes to one farm, is disinfected, and goes to the next farm.**
 - d. A truck and driver who are clean every day.

8. Vehicles can transmit diseases by:
 - a. Having manure stuck to the tires and vehicle frames.**
 - b. Animals licking a truck that delivers to several different farms.
 - c. Having manure inside the cab of the truck.
 - d. Animals coughing on a truck that delivers to several farms.

9. Visitors on the farm should:
 - a. Wear clothing they brought with them.
 - b. Shower in and out of the animal facility.
 - c. Wear clothing given to them by the farm owner.
 - d. Not be allowed in at all.**





Objectives

To teach 4-H members about:

- Swine behaviour
- Caring for their swine project
- Common diseases of swine
- Proper administration of medications

Summary Questions

1. Why is it important to understand swine behaviour?
2. Explain the types of animal identification for swine and the reason for each type.
3. Name one thing that farmers can do to keep their pigs healthy.
4. How can you tell if a pig is healthy?
5. Discuss health problems and common swine diseases in your area.
6. Write down six methods of giving an animal medication.

Suggested Activities

Safe Animal Handling

Receive a copy of BC 4-H's Safe Animal Handling CD and complete the quiz questions at the end of each section.

Creed of the 4-H Stockkeeper

Review the Creed of the 4-H Stockkeeper with your club. Divide the club into groups and using the corresponding activity sheet, have members brainstorm why it is important to complete all 11 activities included in the creed. After members have completed the activity sheet, bring the group back together for a discussion on the value and impact of each item in the creed.

Animal Welfare Concerns

Have the members research and present on a current animal welfare topic facing the swine industry in Canada. You may want to look into the Animal Welfare and Animal Rights Education (AWARE) program and possibly have a presentation on this topic.

Proper Injections

After going through the "Some Rules for Injecting Pigs" worksheet, have a workshop on proper injection techniques using oranges as the injection site.



Creed of the 4-H Stockkeeper

I will:

1. Provide comfortable and sufficient quarters for my livestock.

I will house my animal with enough space to prevent crowding and fighting. I will also help to prevent my animal from being too hot or too cold both at home or during transport.

2. Strive to improve the breeding and quality of my livestock, and the livestock in my community from year to year.

The more structurally sound, efficient and productive our animals are, the less stress will be placed on them.

3. Keep my animal free from parasites.

Keeping animals free of disease is very important to their well-being. By keeping the animals' bedding fresh and clean and ensuring that the eating area of the animals is sanitary, I can help protect the health of my animal. This also requires giving vaccinations and medications as required by the animal.

4. Strive to keep my livestock in good health.

To ensure the good health of my project animal, I will observe it carefully every day, to see that it is eating and behaving normally. If my animal appears unhealthy, I will see that it receives immediate attention and will keep accurate and complete records of any health problems that occur. I will never subject my animal to undue suffering.

5. Feed my livestock on time each day.

I will make sure that I can financially afford to feed my animal the right amount and the right kind of feed every day on a regular schedule. This will provide the nutrition my animal needs and ensure the daily comfort of my animal.

6. Learn as much as possible about the best methods of feeding and caring for my livestock.

By learning about different methods of raising livestock, my animals will benefit from new strategies that help to ensure that my animals receive the best possible care. I can explore new animal husbandry ideas through reading, asking questions, attending workshops and participating in 4-H activities.

7. Be kind to all animals.

I will not take my frustrations out on animals. I will be patient while training my animal. I will never physically abuse my animal and I will only use low-stress handling methods and tools (i.e. paddles).



8. Provide animals with clean water at all times.

All animals need water to survive. Every day I will check that the water supply for my animal is clean, free of ice, easily accessible and working properly.

9. Always be a good sport in competition.

Livestock shows, including Achievement Days, are one way that the public can see how important proper care of our animals is to us. Good manners and a courteous disposition go a long way in presenting a good impression to the public.

10. Keep an accurate record of my projects.

Keeping accurate records will ensure my animal is maintaining proper health, growth and development. Complete and accurate records of vaccinations and treatments will help maintain on-farm food safety.

11. Complete my project and take part in all the activities of my 4-H club each year.

4-H is a place of learning. By taking part in all the activities and completing the project each year, I am allowing myself to learn and experience all that I can about my project. This will help me to improve my understanding of animals and my methods of caring for them.

Special Thanks to Alberta 4-H for this information



Caring for My Animal

Check the things that you are already doing well to care for your animal.

Check which ones you can improve on.

I'm already doing	I want to improve	Care
		Prepare facilities before I get my animal.
		Provide adequate housing and bedding.
		Feed my animal daily and on a regular schedule.
		Feed a balanced ration.
		Provide access to good quality water at all times.
		Control internal and external parasites.
		Any invasive procedures (e.g. castration, docking) are performed when animals are as young as possible.
		Train animals to lead or be handled at a young age.
		Have a planned health program to prevent disease.
		Observe animals daily and get treatment for those needing it.
		Be aware of the signs that my animal is in pain or is suffering.
		Keep feed and treatment records.
		Be aware of an animal's comfort (physical and mental) at all stages of production.
		Minimize or eliminate all procedures or circumstances that may cause stress to my animal.
		Take the time to understand the behavioural needs (e.g. companionship) of my animals.
		Sort and load animals safely and with concern for them.

Special Thanks to Alberta 4-H

Activity – The GOOD, the BAD and the UGLY Game

Supplies:

- Index cards
- Large sheets of paper
- Tape
- Pens or Pencils

The learning objective for this game is to help members identify practices that give agriculture a bad image.

Before the beginning of the game, ask the members how they define the word “humane”. The definition in the dictionary is *kind or compassionate*. Next comes “inhumane”; get the members to describe what they think that means. On 3 sheets of paper write in bold letters GOOD, BAD and UGLY. Tape these papers at different areas of the room either on the floor or walls, whatever is best for your location. You can just print the following page and cut it into sections if desired.

Take the scenarios found on the next page and put them onto cards. Ask members, either individually or in groups, to place the card under the heading they feel it fits best. If the practice could fit into more than one category, discuss this with the members.



<p>Feed a balanced ration</p>	<p>Provide plenty of clean drinking water.</p>
<p>Keeping animals in the sunlight so they get sunburned.</p>	<p>Hauling animals in the heat of the day in the summer.</p>
<p>Keep animals in a warm, dry place that is well ventilated and bedded.</p>	<p>Handling animals roughly when they arrive at a show.</p>
<p>Start training animals to be handled at a young age, never do your training at a fair.</p>	<p>Using hotshots, whips, canes, sticks, etc. to beat animals when loading or showing.</p>
<p>Castrate, dehorn and dock animals when they are young.</p>	<p>Kick, knee, beat, jerk or slap an animal to get them to go where you want them to go.</p>
<p>Provide adequate exercise for all animals.</p>	<p>Using oil on the coat of animals, which makes it shine. But does it make it hot?</p>

Protect animals from predators.	Failure to feed and water animals regularly.
Sort and load animals calmly and with as little stress or force as possible.	Failure to keep pens and stalls clean and dry.
Provide rest periods during long hauls in a transport.	Allowing animals to fight and injure each other.
Give animals plenty of space.	Transporting feeder pigs in a sack in the trunk of a car.
Learn and accept that most of our 4-H livestock project animals will be harvested or else don't purchase them. This usually applies mostly to beef cattle, lambs, pigs and sometimes poultry.	Improperly medicating animals or using unapproved drugs.
Pulling animals behind vehicles to train them to lead.	Leaving animals tied for long periods of time.

<p>Beating, kicking or using a hot shot to train an animal.</p>	<p>Docking a piglet's tail when it is 6 months old.</p>
<p>Housing herd animals alone.</p>	<p>Overcrowding animals in a barn, truck or pen.</p>
<p>Poor animal identification system. Never quite know which animal you are dealing with.</p>	<p>Kicking, kneeling, beating, jerking or slapping animals in the show ring.</p>



Pig Observations

	Observations of a Healthy Pig	Symptoms of a Sick Pig
Animal's Attitude		
Stance and Movements		
Sounds made by the pig		
General Condition		
Skin (texture, colour)		
Head and Neck		
Nose		
Ears		
Eyes		
Respiration Rate		
Heart Rate		
Body Temperature		
Appetite		
Thirst		
Body Discharges		
Sleeping		

Examining a Healthy Pig

It is important to know what your pig looks like when it is healthy. Pigs cannot talk so you have to be able to see when there is something wrong with your animal. Pretend that your Veterinarian asked you to gather information on the health signs of a normal pig, and the symptoms of a sick pig. Fill in the chart below.

Pig Examination Chart

Date:		
Animal Identification:	Breed:	Age of Pig:
Weather and Temperature:	Weight:	Number of Pen Mates:
Housing:	General State of Health	

Date:		
Animal Identification:	Breed:	Age of Pig:
Weather and Temperature:	Weight:	Number of Pen Mates:
Housing:	General State of Health	



Some Rules for Injecting Pigs

- Do not give injections into the ham. Why?

- Avoid injecting through dirty skin. What might this cause?

- If a disinfectant is used to clean the needles and syringes, rinse thoroughly before using. If this was not done what could you cause?

- Inject small amounts of medication at one site. No more than 10cc for an adult sow or boar and 2cc in baby pigs. What could overdoing these amounts cause in the animal?

- Change needles at least every litter or every 10 pigs. Why?

- Change needles when bent, dull or contaminate with manure. Why?

- Do not straighten or reuse a bent needle. What might this cause?

- Clean needles and syringes with hot water between uses, or better yet, use disposable needle tips and wash the barrels between uses. What would this practice prevent?

Special Thanks to 4-H Ontario for this Activity



Some Rules for Injecting Pigs – Answer Key

- **Do not give injections into the ham. Why?**

It is the most valuable part of the carcass for meat and you do not want scar tissue or bruising to be found in this area of the animal. The animal could be severely discounted at market or not used at all. Money lost to the farmer.

- **Avoid injecting through dirty skin. What might this cause?**

Run the risk of introducing infection through the skin and into the body, which may develop into a disease process.

- **If a disinfectant is used to clean the needles and syringes, rinse thoroughly before using. If this was not done what could you cause?**

First of all if you are using a disinfectant to wash your syringes and needles, be sure it is a disinfectant that is approved for use. Next, if you do not rinse well, some disinfectants will leave behind a residue that can react with your injectable medications. This is a form of contamination and may cause problems for the animal injected.

- **Inject small amounts of medication at one site. No more than 10cc for an adult sow or boar and 2cc in baby pigs. What could overdoing these amounts cause in the animal?**

If you overdo the amount of medication in one site there are a few issues. One of the issues is tissue damage at the injection site. Too much medication all in one site can also cause skin lumps that may or may not go away. This would cause a discounted carcass, as the lumps would be visible on inspection.

- **Change needles at least every litter or every 10 pigs. Why?**

A few reasons for this practice are that needles become dull after repeated use. This can tear the skin of the animal very easily. Needle ends tend to develop little barbs on them from repeated use. You also run the risk of transferring infection from a sick animal to a healthy animal without knowing it.

- **Change needles when bent, dull or contaminate with manure. Why?**

Using bent or dull needles can lead to the needle end breaking off in the animal's skin. This will set up a host of problems for you as the farmer. If the broken end cannot be taken out you must mark the spot on the animal where it is and record the incident. You must then contact your marketing agency with the information prior to shipping this animal. They have the right to refuse this animal. Any kind of contamination whether manure, blood, or dirt of any kind can set up an infection in the injected animal.

- **Do not straighten or reuse a bent needle. What might this cause?**

A bent needle is weak; by straightening it you make that needle weaker and run a greater risk of breakage.

- **Clean needles and syringes with hot water between uses, or better yet, use disposable needle tips and wash the barrels between uses. What would this practice prevent?**

This practice will go a long way to prevent the spread of disease and infection in a herd. It will also minimize the risk of broken needles in carcasses.



Swine Reproduction and Breeding

Objectives

To teach 4-H members about:

- Breeding swine
- Gestation of swine and the farrowing process
- Management of piglets

Summary Questions

1. Why is it important to understand the swine reproductive cycle?
2. Compare and contrast natural versus artificial insemination breeding techniques.
3. What is a good disinfectant to use on the farrowing pen? Why?
4. What are the advantages of the use of a farrowing stall or crate?
5. How many feeding stages would a sow have? How does the feeding change through each stage?
6. Name three piglet management techniques and explain how to properly perform each one.



Suggested Activities

Farrowing Areas

Have the members research farrowing crates, pens or other methods and present on their findings.

Making a Creep Feeder

Through showing examples, members can model and/or make their own creep feeder. The creep feeders should contain all appropriate aspects of a real creep area, for example a heat lamp and feeder.

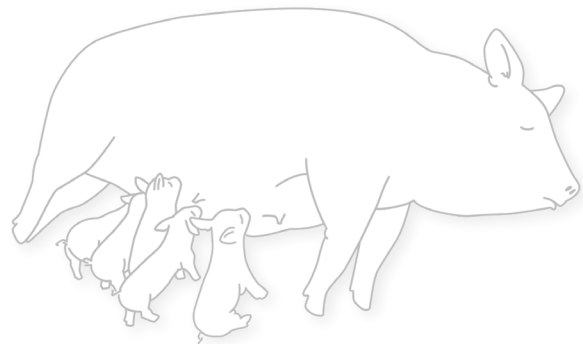
Piglet Processing

Have a producer, veterinarian, or senior member demonstrate the husbandry techniques on the practical portion of the Husbandry Senior Skills Exam, including:

- Removal of 'eye teeth'
- Identification
- Castration
- Tail docking
- Iron supplement

Feed Comparisons

Research commercially available starter and nursery feed. Check price, ingredients and choice of medications.



Understanding Breeding Systems

There are various strengths and weaknesses of different swine breeds. By looking at the swine breeding systems listed, decide what is meant by each one and what would be the advantages and disadvantages of each. This will require some additional research from other sources. If you find a good resource remember to share it with others in your club.

Three Breed Rotational

- Description:
- Advantage:
- Disadvantage:

Static Terminal Sire

- Description:
- Advantage:
- Disadvantage:

Crossbred Terminal Sire

- Description:
- Advantage:
- Disadvantage:

Two Breed Rotational

- Description:
- Advantage:
- Disadvantage:



The Cycle!

In order to gain a complete picture of the overall production cycle of swine you can use the following activity page. It is important to know about the production cycle so that you can see the importance of record keeping, timelines, and good planning practices.

While you are completing this activity you should think about things like:

- Is there a point where feeding should be increased? Decreased?
- How old should breeding gilts be before they are bred? Why?
- Is it important to know the breeding date?
- Why should you wash a sow before farrowing?

Production	Calendar/Day/Timeline	Life Cycle Details
Prior to Breeding		
Breeding		
Gestation		
Preparing to Farrow		
Farrowing		
Lactation		
Weaning/Nursery		
Growing		
Finishing		
Prior to Breeding		



Design your Farrowing Area!

It is a good idea to plan ahead for farrowing. Since you have decided to breed your gilt or sow, have you decided how your farrowing area will look? You have to be sure that you will have a space that is properly laid out. Your challenge is to draw the layout of your facility for farrowing and life with new piglets. If you are using any symbols, be sure to include a key.





Objectives

To teach 4-H members about:

- Training techniques
- Grooming and preparing for the show
- Showmanship skills

Summary Questions

1. What is the aim in training a pig?
2. What are the signals used to direct a pig?
3. When should the trimming on the feet be done? Why?
4. What can be done for grooming in preparation for a show?
5. How is the pig handled in the ring?
6. How should the showman dress?

Suggested Activities

Making a Showstick or Cane

Making a showstick or cane.

Showmanship Yeah's and Nay's

As a club, brainstorm a list of showmanship Yeah's and Nay's. Include points such as how to respond to the judge as well as show ring etiquette.

Practice Show

A practice show provides an excellent opportunity for members, particularly those that are new, to become comfortable handling their animal in a show ring setting. It also allows the members to see how their animal will react to the other people and animals in the ring. Try to arrange for a practice show prior to the first time the members will exhibit their animals. You may act as the judge yourself or you may ask another qualified individual. Ask the members to complete the normal manoeuvres required in showmanship. Rather than evaluating the members, provide commentary throughout. Give them suggestions for improvement and be sure to praise them when they do things well.

Member Training Updates

Report by every member, "Progress in training my pig for Achievement Day".



Preparing for the Show!

In pairs or small groups have your members discuss the following list and decide what and why they might need the following items.

Cane Show Schedule Spray Bottle Rags Water Bucket
Bedding Clippers Feed Pan Feed Soap
Sprayer Water Hose

Are there any items missing from the list? How would your members get everything they need to the venue?

Have your members make up their own "Show Checklist" to make sure they have everything that they need.

—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—



Challenge your Members!

Organizing a Swine Showmanship Clinic

Provide an opportunity for your members to help the others in the club learn to show their pigs while learning how to plan an event for their club.

Tips!

- Organize your clinic so that members are doing rather than listening and watching.
- Get an experienced person to come show your members all of their tips and tricks.
- Have several different topics – grooming, training, answering questions, using equipment and any others you can think of.

After it is over:

How well did the older members work with the younger members? With each other?

Was everyone involved in planning? Explain.

How did they decide who to bring in to share their knowledge?

Is there anything that can be improved upon, or done differently?

Are there other educational events they would like to organize for their club?



Decisions, Decisions, Decisions

Everyone faces difficult decisions from time to time. Sometimes it is hard to admit when we have been wrong, and sometimes we do not realize when we have made a wrong decision. In pairs or small groups, discuss the following scenarios. Answer honestly what you think should or should not be done, and why.

Scenario #1 – You observe a member hitting their animal. When you approach them about it they say that it makes the animal look bigger.

Scenario #2 – You find out that a member in your club has not actually raised their animal. Their older brother actually did all of the work for them.

Scenario #3 – Although you are usually quite good at doing all of your chores you have neglected to clean up your pig's pen. The neighbours have complained to your parents about the smell.

Scenario #4 – During the fair everyone has to take a turn on barn duty, but you really want to go on the rides in the midway when you are supposed to be in the barn.

Describe some other situations that you may have seen that did not seem like you or another person made a correct choice.





Objectives

To teach 4-H members about:

- Marketing of swine in BC
- The different meat cuts from hogs
- Quality assurance and traceability

Summary Questions

1. What is the approximate weight to market hogs?
2. What are some positive aspects of the swine industry in BC?
3. What are the Canadian primal pork cuts?
4. What are elements of an on-farm food safety program?
5. Define traceability and why it is important.
6. Outline some ways pork products could be marketed differently.

Suggested Activities

Advertising Campaign

Divide your members into groups. Assign each group a primal pork cut. Challenge each group to develop an advertising campaign that would increase the consumption of these products. Give the members a specified period of time to develop their campaign and then have them present it back to the rest of the group. The campaign could be open to their creativity or you could specify the type of campaign they are to create. Some possibilities are radio ads, television commercials, jingles, posters and articles.

Canadian Quality Assurance Program

Members research and learn about the Canadian Quality Assurance Program.

Guest Speaker

Have a guest speaker from the BC Pork Producers Association and/or the BC Hog Marketing Commission.

Online Investigation

Try out the virtual meat counter found through this website:

<http://www.putporkonyourfork.com/>



Exploring a Meat Counter

Now it is time to do some research. Take a trip to your local grocery store and fill out the following questions. You may want to even stop at a couple of grocery stores and compare prices and the variety of products. If the store is not busy you might even ask one of the people working behind the meat counter to help you.

What pork cuts are in the store?

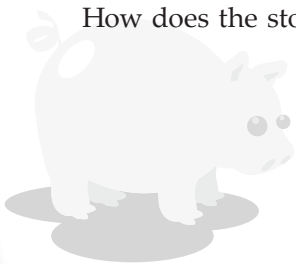
Are there prepared pork products in the store?

What is the most expensive pork product in the store?

What other kinds of meat are in the store?

Is there different packaging? Are there products from BC? From other countries?

How does the store display pork? Is there in-store advertising for pork?



Pork Products!

There are many different products that are made from pork. It is up to you to find a new pork product to promote. You may want to talk to people in the community, local grocery stores, or a local pork producer to get some ideas. Once you have an idea try to figure out how it would be manufactured and how much it would cost. How would you market this product? Would people buy it?

Swine By-Products

Aside from pork, there are lots of different products that come from pigs. Some items include bone china, rennet for cheese, stearin for chewing gum, glycerine, leather goods, gelatine, drum heads, violin strings, artist paint brushes and industrial lubricants.

You may want to do more research and make a display board explaining the different products and what part of the hog they come from. Try this word search to get you going.

D D C A K T W I C K L A H C K A
 Z I Q E N Z B E R U P S V C E Z
 E D E U R R M C E L U Y S P H G
 P I R S P E P H B R L E A R S Q
 H L S E N H A F B D C L G E S N
 Q C A T Z A O R U A L O L R N S
 A T S S N I I L R O P E D E N E
 A N O I T A L U S N I U Z O T S
 P I R A H I C I C T S E T E T S
 N G S S O E C I T D E T Z T F U
 O E L E D P I S R R U R Q E Y N
 T R A O H D S O F B E E Y D E R
 S C P M V C C I R E U F T G V S
 P C O S M E T I C S I L K P R Q
 E N N A R N S A E R T E U L G C
 N A S S A L G L M E G M A M H M

INSULATION

FERTILIZER

GLOVES

BUTTONS

MATCHES

CHALK

HAIRBRUSH

UPHOLSTERY

LUBRICANTS

PLASTICS

CEMENT

GLASS

ANTIFREEZE

RUBBER

COSMETICS

RECORDS

GLUE

PUTTY



Saying Good-Bye

Raising any type of livestock is full of ups and downs. There is the excitement and eagerness of preparing for a new animal, and then there is the loss and sadness when it is finally sold. Young people often have mixed emotions about selling their animals. Many are sad to see their project go, but have some sense of accomplishment that their task is completed. Change can be hard to handle.

To prepare your club members before they sell their animals, have all of them write a list of 10 changes they have gone through in their life. These can be good or bad changes like going to school for the first time, or moving away from a best friend. After they have completed their list discuss the following questions with them.

- How does it feel to talk about changes?
- How do you express yourself when you are confronted with a major change?
- Did you have mixed emotions about any of the changes you wrote down?
- What does that mean?
- How can you help someone who is having a hard time accepting changes?
- Can you prepare yourself for a loss – like selling your animal?



Swine By-Products – Answer Key

D D C A K T W I C K L A H C K A
 Z I Q E N Z B E R U P S V C E Z
 E D E U R R M C E L U Y S P H G
 P I R S P E P H B R L E A R S Q
 H L S E N H A F B D C L G E S N
 Q C A T Z A O R U A L O L R N S
 A T S S N I I L R O P E D E N E
 A N O I T A L U S N I U Z O T S
 P I R A H I C I C T S E T E T S
 N G S S O E C I T D E T Z T F U
 O E L E D P I S R R U R Q E Y N
 T R A O H D S O F B E E Y D E R
 S C P M V C C I R E U F T G V S
 P C O S M E T I C S I L K P R Q
 E N N A R N S A E R T E U L G C
 N A S S A L G L M E G M A M H M

INSULATION

GLOVES

MATCHES

HAIRBRUSH

LUBRICANTS

CEMENT

ANTIFREEZE

COSMETICS

GLUE

FERTILIZER

BUTTONS

CHALK

UPHOLSTERY

PLASTICS

GLASS

RUBBER

RECORDS

PUTTY





Objectives

To teach 4-H members about using correct swine terminology.

Suggested Activities

Games can be a fun way to learn and remember new words that members may not know. Below are a few games to start off your word game library. As you run across others, why not add them to your leader's guide and share them with others.

Alphabet Challenge

Write the alphabet on a piece of poster paper or flipchart. Brainstorm with your club swine words that start with each letter. Try to come up with at least one word for each letter of the alphabet. Example: A – antibiotic; B – boar; C – crude protein

An alternative way to use this activity is to have your club members sit in a circle. Have the first member come up with a swine word that starts with A, the second a swine word that starts with B and so on. Continue around the circle until the end of the alphabet.

Vocabulary Puzzles

Draw puzzle pieces on 8 1/2 x 11 copy paper. Write a vocabulary word on each piece. Copy and have members cut their puzzle apart. Call out the definition and have them reconstruct the puzzle.

Hangman

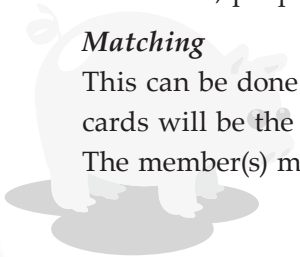
Hangman is an excellent way to learn new vocabulary. Bring a poster paper and coloured pens. Ask each member to come up with a word or phrase related to raising swine. Give each member a piece of paper and a pen and have them draw their hangman out. Have the members take turns leading the club in a round of the game.

Vocabulary Sticker Game

Write each vocabulary word on a small card. Make enough cards for each member to have one card. Call out the definition. The member with that word on their card who stands first and says the word must use it in a sentence correctly. If correct, they earn a sticker or point - whichever you want to use - 2 people will have each word usually. After giving out 2 or 3 definitions, people trade cards and the game continues.

Matching

This can be done in a group, a pair, or solo. Have two sets of cards made up. One set of cards will be the vocabulary words, and the other will have the matching definitions. The member(s) must match the vocabulary words with the definitions.



Conducting A Swine Trivia Contest!!

A fun way to test the knowledge of your members is to run a trivia contest. Putting your members into teams works best. If the member has to work on their own, it may seem too much like a test and they may not have as much fun. Make up a list of 20 questions. Some may be multiple choice, or not, depending on the ages of your members.

Example question:

What is a gilt?

- a) a female pig that has had a litter
- b) **a female pig that has not had a litter**
- c) a male pig used for breeding
- d) a castrated male pig

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.





A Proficiency Certificate is an indication that a 4-H member has a complete working knowledge of junior 4-H work. It is a privilege to write a Junior Proficiency exam; a privilege given by the leader when he/she feels a member has a complete working knowledge in project work, including Public Speaking, Demonstrations, Judging, etc.

Requirements to Write

- Any time following a member's thirteenth birthday.
- The member must have earned two badges.

Questions and Answers

A Proficiency Master Guide of questions and answers is available for 4-H leaders only. This is the basic requirement only. Leaders are to make up exams based on Master Guides of questions and answers and mark them. The answers provided in this master guide are guidelines and completeness of the member's answers is up to the leader marking the exams.

The exam should include 2 sections:

Section A: Specific project knowledge questions, 80/100

- questions that test the member's complete working knowledge of their project

Section B: General 4-H knowledge questions, 20/100

- questions from the 4-H pledge
- 4-H Club Executive duties
- naming local 4-H and agriculture dignitaries

Exam Marks

A score of 60% is required to pass. *Submit marks and/or marked tests to your DISTRICT 4-H AWARDS CO-ORDINATOR for certificate.* The exam may take the form of an oral discussion between the member and leader if a leader feels that it would be more appropriate.



Junior Proficiency Deadline

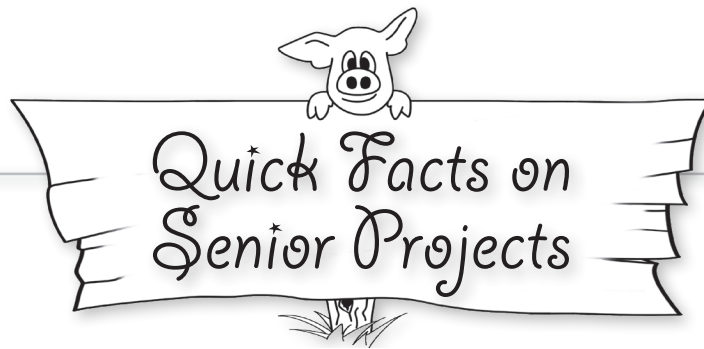
To enrol as a Senior member, a member must write his/her proficiency exam prior to December 31st of the previous year.

LEADERS must submit results to the District 4-H Awards Co-ordinator within a week of December 31st. District 4-H AWARDS CO-ORDINATORS should check with all District 'A' Leaders to collect the Junior Proficiency scores within one week of the deadline.

A member who writes his/her proficiency exam after December 31st **completes** the year as a junior and is eligible to receive Senior Skill Certificates and privileges of the Senior 4-H Program the **following year**.

For more information on Junior Proficiency Certificates and other 4-H Awards, consult the 4-H Award Opportunities Guide (Publication #128).





Senior Management, Senior Self-Determined, and Junior Leadership projects are intended to challenge senior members and provide them with an opportunity to develop new skills. The senior level projects can also help members to earn external 4-H high school course credits. Part of your role as a 4-H leader is to provide information to members about all of the project options including those available only at the senior level.

Senior Management Projects

Senior Management projects are specific to the project area. In the swine project Units V, VI and VIII are Senior Management options.

Points of Interest

- 10 to 12 months in length.
- Proposal to be submitted to the BC 4-H Office.
- Project to be approved and evaluated by Youth and Community Development Staff.
- Project to be overseen by the club leader.
- Livestock Senior Management Record Book (Publication #411) may be used for some projects. If the record book is not applicable to the project, the members must develop their own record keeping system. Detailed project records are required.

Senior Self-Determined Projects

Senior Self-Determined projects may be on any subject and do not need to be related to swine project work in any way.

Points of Interest

- 10 to 12 months in length.
- Proposal to be submitted to the BC 4-H Office.
- Project to be approved and evaluated by Youth and Community Development Staff.
- Project to be overseen by the club leader.
- Members must keep detailed record of the project.



Junior Leadership Projects

Junior Leadership projects provide an opportunity for experienced senior members to share their skills with the rest of the club. Junior Leadership projects should focus on teaching a specific skill (public speaking, judging, showmanship, or other topic) or on the organization of a 4-H event.

Points of Interest

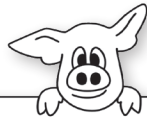
- 4 to 6 months in length.
- Members must be 14 years old and have achieved a minimum of 2 years in 4-H.
- Application from Junior Leader Record Book (Publication #5110) to be submitted to the BC 4-H Office.
- Project to be approved and evaluated by Youth and Community Development Staff.
- Project to be overseen by the club leader.
- Members must keep a detailed record of their project using the Junior Leader Record Book (Publication #5110).

General Tips

- If senior members are unsure about what type of project to try or whether a specific idea will be suitable for a senior level project, consult the Youth and Community Development Staff. They may be able to help with some ideas on expanding the project.
- Proposals should be sent to the BC 4-H Office before the project is started.
- Make sure the proposal your member sends in is thorough.
- When the Youth and Community Development staff member writes their approval letter they may ask some questions. This is to help clarify the project so the leaders and marker are clear on the project goals.
- The club leader should check on how the project is progressing regularly.
- The member should update the rest of the club on how their project is progressing at club meetings and events.
- The project leader should provide written comments throughout the project for the member to include in their records.
- Just like the outline, make sure the completed project is detailed and thorough. The marker should be left with no questions about what was done.

For more information on Senior Management, Senior Self-Determined, and Junior Leadership projects consult your project regulations, Self-Determined regulations (Publication #5005), and the Junior Leadership regulations (Publication #5101).





Resource List



Books

Through the USDA National Agricultural Library, the following link has a listing of swine books and proceedings: <http://www.nal.usda.gov/awic/pubs/swinehousing/books.htm>

Websites

Infobasket – BC Ministry of Agriculture and Lands: www.infobasket.gov.bc.ca

Hog Fact Sheets and Publications – BC Ministry of Agriculture and Lands:
www.agf.gov.bc.ca/hog/factsheets.htm

BC Pork Producers Association/BC Hog Marketing Commission: www.bcpork.ca

Canadian Pork Council: www.cpc-ccp.com

Virtual Meat Counter – Put Pork on your Fork:
http://www.putporkonyourfork.com/put_pork_on_your_fork/virtual_meat_counter.html

Farm and Ranch Safety and Health Association (FARSHA): www.farsha.bc.ca

The Merck Veterinary Manual: www.merckvetmanual.com/mvm/index.jsp

Livestock: Swine – Ontario Ministry of Agriculture, Food and Rural Affairs:
<http://www.omafra.gov.on.ca/english/livestock/index.html>

Livestock: Pork – Manitoba Agriculture, Food and Rural Initiatives:
<http://www.gov.mb.ca/agriculture/livestock/pork/index.html>

Livestock: Pigs – Alberta Agriculture, Food and Rural Development:
<http://www.agric.gov.ab.ca/app21/infopage?cat1=Livestock&cat2=Pigs>

Through the USDA National Agricultural Library, the following link has a listing of swine websites: <http://www.nal.usda.gov/awic/pubs/swinehousing/web.htm>

Magazines

Western Hog Journal: <http://www.albertapork.com/news.aspx?NavigationID=1071>

Better Pork: <http://www.betterfarming.com/search-betterpork-magazine-archive>



B.C. 4-H Provincial Council

2743 – 30th Street

Vernon, B.C. V1T 5C6

Toll Free: 1-866-776-0373

Website: www.bc4h.bc.ca

