

Swine Handbook for Novice FFA Members

A Senior Project

Presented to

the Faculty of the Agricultural Education and Communication Department

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In Partial Fulfillment

of the Requirements of the Degree

Bachelor of Agriculture Science

by

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Abstract

This project will contain a student teacher handbook on how to raise a market hog for the fair. I will include the 7 main types of swine breeds shown at fair, how to read ear notching and identify each body part, as well as the proper housing, bedding and health. There will also be a weight log that will allow the students to log their pigs average daily/weekly gain. The purpose of this project is to develop and to implement a student teacher handbook to novice FFA members. With these tools, more students will be able to navigate through raising a market hog for exhibition and have more successful outcomes on their junior livestock projects.

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Chapter One

Introduction

The Supervised Agricultural Experience or (SAE) starts in the classroom and helps complete the three integrated parts of an agricultural education program. It is with the goal of assisting the students into getting evolved with different aspects of agriculture. When students put in 10 hours of work to their project, they are then allowed to continue this project and turn it into a youth livestock project.

Youth livestock projects are some of the oldest informational education efforts implemented through public schools to give students an opportunity to work closely with live animals. While working with live animals, they are responsible for the health, growth and care of another animal and give's the members a sense of life. The exhibitors are learning something about the agricultural industry and are learning to appreciate livestock production. Not only does SAE's and livestock create a sense of worth and responsibility in a student, it also builds a competitive atmosphere that when they complete their project, the student can't feel a sense of pride.

Statement of Problem

When it comes to showing a project at a local fair, anyone can agree that winning and receiving ribbons and a check for hard earned work is very satisfying. But, on the other hand, when you are unable to participate in market and show because your animal did not make weight, is a devastating and discouraging feeling. Personally, being on both sides of the spectrum and know just how rewarding or difficult it can be. The problem is

that there can be much misinterpretation and an increasing number of market hogs that do meet the requirements to show because the exhibitors don't know how to properly care for their animal. Because of this problem, it is necessary to create a handbook for students on the qualifications and requirements to raise a market hog.

Showing a livestock project at an exhibition for the first time can be a lot of fun and a great investment but once you purchase your animal and take on full responsibility, it can be very overwhelming if you don't have the proper guidance. Not only do you have to provide a shelter for the animal, you must provide proper nutrients and shots. If each student does not know how to take care of their project, their money and time will start to turn into a disaster.

The author of this senior project has decided to design a basic handbook for handling and caring for a market hog. This project will be for first year (novice) FFA members. It has been a reoccurring problem in many FFA departments that students take an interest in showing their SAE project at a local fair and with not proper guidance, their project fails to make weight.

Importance of the Project

The project is important because it will not only relieve stress on the swine advisor but it will allow students and parents to understand the planning and care it takes to manage their market hog and make the animal look show quality. It is a key aspect that the student knows the proper way to spend their time and money correctly in achieving their goal to show their market hog at the fair.

Purpose of the Project

The purpose of this project is to design a handbook that will assist novice FFA members in successfully raising a market hog for fair. This handbook will provide proper handling, nutrition, and care for a show animal and will act as a guideline to help answer basic questions regarding weight gain and fair requirements. This handbook is intended to inform students, parents and swine advisors that the animal is in the best environment and that all parties are on the same page. It is imperative that this handbook gives the exhibitor the knowledge to succeed.

Objectives of the Project

The objectives to successfully accomplish the purposes of this project are:

1. To gather information that multiple swine advisors in the area think is necessary to add to this handbook.
2. To reduce the number of show animals turned down at the California Mid-State Fair.
3. To provide valuable and credible information to FFA novice members.
4. To prepare FFA members to adequately care for their show animals.

Definition of Important Terms

Future Farmers of America: An inter-curricular student organization for those interested in agriculture and leadership. It is one of the three components of agricultural education. *Abbreviation: FFA*

Budget: An estimate of costs, revenues, and resources over a specified period, reflecting a reading of future financial conditions and goals.

Exhibitor Handbook: An entry book, prize list contest book or other publication specifying rules and awards for fair contest.

Exhibitor: Someone who organizes an exhibit for others to see, a person who provides an exhibit for a display

Livestock Judging: Consists of carefully analyzing animals and measuring them against a standard that is commonly accepted as being ideal. Also has been defined as a study of the relationship between an animal's form and function.

Supervised Agricultural Experience: A required component of a total agricultural education program and intended for every student.

Novice FFA Member: First year showing a junior livestock project

Summary

The author's intention of the student handbook is to provide proper knowledge and guidance to novice FFA members to excel with their livestock projects. If the handbook is made easily accessible and distributed to many classrooms with novice FFA members, they will have the tools to succeed with their projects.

Chapter Two

Literature Review

The purpose of this project is to assist FFA members in successfully raising a market hog for exhibition. This project will act as a guideline to help answer basic questions and provide useful information to properly care and show their market hog in an arena. It will inform novice FFA members, parents and leaders how to make sure that the animal is in the best environment, fed properly and presented to the judge to the best of the member's ability. This project will also act as a way of communication between the students and the teacher, to allow all parties to be on the same page with raising a market hog. It is important that this handbook gives the novice exhibitor the knowledge to succeed.

Supervised Agricultural Experience

The supervised Agricultural Experience or (SAE) starts in the classroom, completing the three parts of an agricultural education program. These three parts consist of: class room instruction, FFA and a supervised agricultural experience (Supervised Agricultural Experience). All students in FFA are required to begin and complete an SAE, thus allowing each student to apply what they are learning in the classroom to help broaden and developed specific skills, learn expected workplace behavior, and consider multiple careers and occupations. While students have the option to pick what they choose as their SAE, there are 6 categories to consider;

Ownership/Entrepreneurship, Placement/Internship, Research, Exploratory, School-based Enterprise, and Service-Learning (Supervised Agricultural Experience). While all types of SAE programs can benefit and contribute to a student's agricultural education, Ownership/Entrepreneurship allows the student to plan, implement and operate financial risk in a food, agriculture or natural resource-related business. This type will be what all novice FFA members will put as their SAE when they raise a market hog for exhibitors.

When a student becomes an exhibitor, they bring their SAE to a local fair and show it to judges as a livestock project. A junior livestock project is a way to encourage personal growth and development in a young person. It allows the student to take their knowledge obtained from their SAE and apply it their investment in hopes to receiving money and awards for their hard work.

Nations Swine Industry

It is a well-known fact that the swine industry is rapidly growing throughout the country. Based on a UDSA Foreign Agricultural service pie chart, Pork is the worlds most widely eaten meat at a total of 40%, while an average of 81% of Americans consume pork at least once in a two-week period (Pork Quick Facts, 2015). The Midwest or more commonly known as the corn-belt is the "heart of the industry" where the feed and grain industry helps support the growing pork production. In 2013, there were more than 67,000 pork producers that marketed over 112 million hogs, which provided a total grossing receipts of \$23.4 billion (Pork Facts, 2015). Since 2013, technology has increased causing production facilities to decrease but total number of hogs has increased in the past decade. Almost 547,800 U.S. jobs are all due to the growing pork industry.

These jobs have ranged from, “ranging from input suppliers to producers to processors and handlers as well as main street business that benefit from purchase by people in those industries” (Pork Facts, 2015).

Since the pork industry has been skyrocketing because the positive health concerns of it being the new “white meat”, the high demand of processed meats and the numerous jobs available to the U.S., the United States Pork industry is an integral part of the United States economy. Immersing novice FFA students into this field of agriculture by raising market hogs for showing will only help the growing industry to continue to be successful.

Handbook

The creation of an instructional handbook is a historical tool for success. The intent of a handbook is to assist you in understanding the topic at hand. Handbooks have been used for many things, from the work force and Human Resources, the government, to homes and technology. Most times they consist of definitions, instructions and guidelines that are present to ensure an understanding for an issue or topic.

The primary purpose of the student-teacher swine handbook for Novice FFA members is to provide definitions, instructions and guidelines on how to properly raise and exhibit a market hog. The information present in the handbook will be up to industry standards and will ensure safe practices, both for the exhibitor and the animal. This handbook can help minimize any confusion and lack of communication between the student, parents and teacher involved with this SAE/ livestock project. Many Swine Care Handbooks are made to tend to the industry, where the two main objectives are to take care of one’s animals as an ethical responsibility, as well as a necessary business (Swine

Care Handbook). It is imperative that this handbook follows those two main objectives and gives the exhibitor the knowledge to succeed in this SAE/ livestock project.

Summary

With the national swine industry continuously growing and the importance of SAE's in the FFA, a well-done student swine handbook for Novice FFA members is very important. This project is to provide definitions, instructions and guidelines on how to properly raise and exhibit a market hog and with doing this, the Novice FFA member will be given the tools to grow through learning and experience with his/her swine project.

Chapter Three

Methods

Learning how to create a proper handbook for novice FFA members on how to properly raise and show market swine at the fair requires instruction and proper planning. The first step was to consult a panel of experts to gather handouts and information that helped create an outline of useful tips and instructions for the handbook. Once handouts and information had been discussed and an informational outline had been created, outside resources were found for additional help with the formatting of this project. The resources focused on the American Psychological Association (APA) formatting guidelines, which is the exact format and content required for senior projects.

Management Consultation

I assembled two individuals to make up my panel of experts. They were contacted when conducting the creation of a handbook for novice FFA members on how to show market swine at the fair. The first expert, McKenna Martin teaches agriculture and is the Swine Advisor for Lompoc High School. Martin was informed on the idea of creating a handbook and agreed to help provide her knowledge and useful handouts. Martin explained how she thought the handbook should be formatted and what useful information would help novice FFA members succeed.

Anna Bates, the department head and Swine Advisor of San Luis Obispo FFA Chapter, provided a list of criteria that novice FFA members must know in order to raise a successful and well-managed market hog. Bates also provided a list of feeds and

practices that should not be included in this handbook, as well as formatting suggestions. Bates agreed to also be the last individual to oversee the handbook and approved the project outline that had been created. There was also a list of resources provided that helped contribute to the process and creation of the handbook.

Gathering the Available Resources

There were both print and online resources used when creating the handbook. The print resources used were previous handouts and instruction pamphlets from Lompoc and San Luis Obispo agriculture departments. The previous handouts and instruction pamphlets were both consulted as references and aided in creating the novice FFA handbook. The online resources used were all very helpful in conducting the proper format and finding useful charts and information to create a more efficient and organized handbook. In addition to the handouts from the panel of experts and the data collected online, the Digital Commons at Cal Poly library provided exceptional examples of other student's senior projects that helped aid the author in learning how to design and format a handbook. Print, online and examples of online senior projects completed in the agriculture department found under the Digital Commons were all useful resources in understanding and creating the handbook for novice FFA members on how to show market swine at the fair.

Developing the Manual

After consulting a panel of experts, both agriculture teachers, researching online sources and the online senior projects completed in the agriculture department found

under the Digital Commons, choosing the most appropriate information and diagrams for novice FFA members to understand, the handbook began to develop. It was important to implement color and make sure it the handbook was very user-friendly. The handbook was easy to read due to large fonts, bullet points, images with captions and diagrams. The colors picked were national blue and corn gold. In order to keep the handbook user-friendly, diagrams, charts, pictures and specific vocabulary were used to give the Novice students a better grasp on what was expected of them. The handouts both Martin and Bates were implemented in the handbook and the senior project that was available through the Digital Commons also was referred. The resources used in the creation of this handbook allowed it to be user-friendly and aesthetically pleasing.

Continuous Revision Process

Meetings were scheduled regularly with both Martin, Swine advisor of Lompoc High School FFA Chapter, and Bates the department head and Swine Advisor of San Luis Obispo FFA Chapter to make sure the handbook was following the project outline and that all the proper information was being included. These meetings were once a week and would last 20-40 minuets. Due to this senior project being developed in electronic form, spelling, format, content and grammar were correct in the write up of this project.

Summary

A handbook for Novice FFA members on how to properly show and manage a market swine was created with help and supervision of two Swine FFA Advisors in the San Luis Obispo Area. The material presented in this handbook was chosen specific to

first time students raising a market hog and included helpful handling techniques, feed to weight gain measurements and showing requirements that will help guide the student to be successful at the California Mid State Fair. The final draft of the handbook was reviewed by the panel of experts and made last minuet revisions to make the handbook more successful for future Novice FFA members.

Chapter Four

Results and Discussion

On the following pages, one will find the complete novice FFA student Handbook on how to successfully raise a market hog for the California Mid-State Fair. This includes sections on the general raising techniques for market hogs and pictures of each breed.

After this section, subsections were created including information of weight goals, feed, basic showmanship terms and questions about the general guidelines on how to make that specific breed of hog successful at the fair. The last section includes a list of proper equipment and diagrams on how to use each one that will aid the owner in successfully raising and caring for their market hog.

HOW TO RAISE A MARKET HOG

NOVICE FFA STUDENT HANDBOOK



<http://www.timescall.com/portlet/article/html/imageDisplay.jsp?contentItemRelationshipId=6146954>

NAME: _____

SCHOOL: _____

CHAPTER: _____

INSTRUCTORS: _____

Authors Note

Thank you so much for choosing this handbook to use for your Novice FFA students! I decided to do this as my senior project because after raising market hogs in FFA for 3 years, I learned the importance's of knowing the correct information and being on the same page with my advisor. Also, being on track to become an Agriculture teacher myself, I have come to realize just how busy Ag teachers schedules are and being able to hand out a swine "bible" to their students will help eliminate confusion and questions. Below I have included the main information for Novice FFA members will be expected to know that will guide them to succeed in raising their first market hog for fair. The subjects are; swine breeds, parts of the swine, ear notching, types of housing and bedding, health and welling, a weight log and what they need to bring to fair.

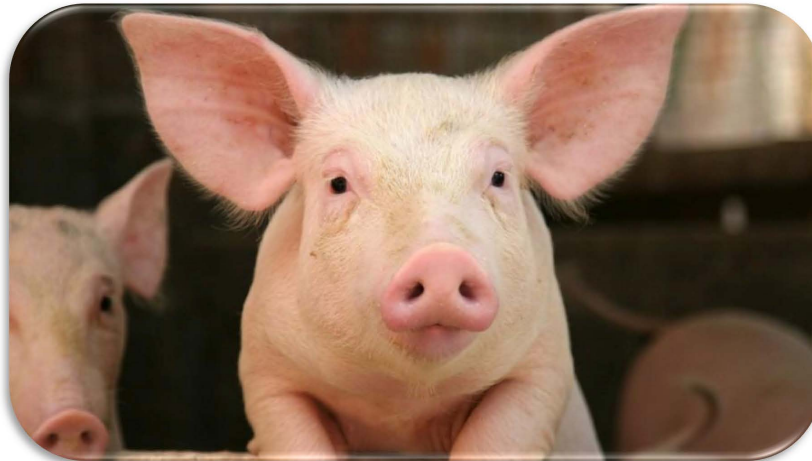
I hope you find this handbook to be successful for you and your students and find the information useful. Have a great fair season ☺

The editor,
Amelia Brown

Introduction

Welcome to the 2016 Swine Group! First off, I would like to congratulate you all on qualifying to raise your first market hog for the California Mid-State Fair! Your “Swine Bible” is going to provide everything you will need to know in order to raise a market hog for the fair! DO NOT LOOSE THIS HANDOUT! Below is a list of everything that will be in this handbook so you can easily look up everything! It is your responsibility to keep up with your projects health and weight gain but if you have any questions, make sure you inform your advisor ASAP.

- I. Swine Breeds
- II. Parts of a pig
- III. Ear notching
- IV. Housing and bedding
- V. Health and Well being
- VI. Weight goals and Weight Log



<http://kids.nationalgeographic.com/animals/pig/#pig-babies-feeding.jpg>

Primary Market Swine Breeds

Below are the 7 main types of market swine breeds you will see at the fair. By each picture, there is a small description of each breed. You must read through these and make sure you can learn and identify each breed, INCLUDING YOUR OWN, before you start showmanship practices! ☺

Yorkshire: The Yorkshire is one of the most recorded breeds in the United States. They are known for their good mother lines and are very sound and durable. They are white in color and have erect ears. They also are very muscular with low back fat.



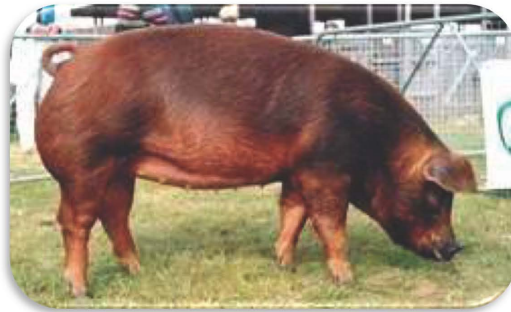
<http://www.thepigsite.com>

Hampshire: Known as one of the most important breeds. Their coloring is black with a white stripe that goes around their shoulder blades. They are widely used as the sires for many cross breeding and are known for their lean meats and carcasses.



<http://www.nottshowpigs.com>

The Duroc: These pigs are known as the “red pigs” and are the second more recorded swine breed in the U.S. They have drooping ears and grow very easily. They are very durable and their muscle qualities are high and their feed efficiency is good.



<http://www.thepigsite.com>

The Gloucestershire Old Spot: Also known as the “spotted pig” are known for their clearly defined black spots and white skin and long droopy ears. They have a broad body with normally large hams. The spotted pig is known for their fine carcass which helps produce top quality meat.



<http://www.hurdshowpigs.com>

The Landrace: Very similar in the colors and build of a Yorkshire, the Landrace has a long body with large and heavy ears that are carried close to the face. The skin of a landrace must be white with little spotting and discoloration.



<http://tcpermaculture.com>

The Chester White: The Chester White breed is used mostly as meat pigs and are exercised in the use of crossbreeding. This breed is very durable and has a fair colored skin, lighter than the Yorkshire and landrace. Their eyes are slightly droopy but significantly smaller than the landrace.



<http://armstronggenetics.com/winners>.

The Crossbred: A crossbred pig or otherwise known as a "blue butt" shown by the blue spots on this pig's ham, are a cross between two other breeds of hogs. Crossbreeds can have all different appearances and will be the most common type of pig when it comes to showing at the fair. They can take on the best traits from different breeds.

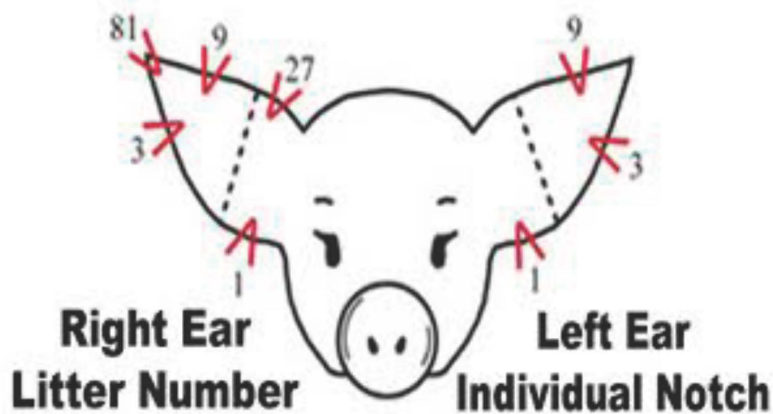


<http://harrellfamilyfarm.com/>


Ear Notching

Ear Notching is very important! It is done on newborn pigs so the breeder can use it as identification. When it comes time for you to pick out your own pig, it is very important to know how to read the ear notching on the piglets so you can tell the breeder which one you want to buy. The pig's right ear is used for the litter number, while the left ear is used to show individual identification for each pig in the litter. When reading the ear notch you read the right ear (litter number) then the left ear (individual identification number). Also, the higher you advance in showmanship—intermediate and advance, you will be expected to know this for questioning.

UNIVERSAL EAR NOTCHING SYSTEM




<http://cpsswine.com/universal-ear-notching-system/>



27
 $(3+3)=6$
 1

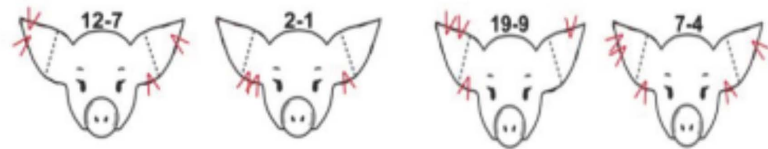
Example: Litter number
 $(27+6+1)=34$



9
 3
 $(1+1)=2$

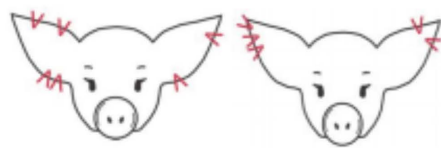
Example: Pig number
 $(9+3+2)=14$

More Examples: (Litter number-Pig Number)



12-7
 2-1
 19-9
 7-4

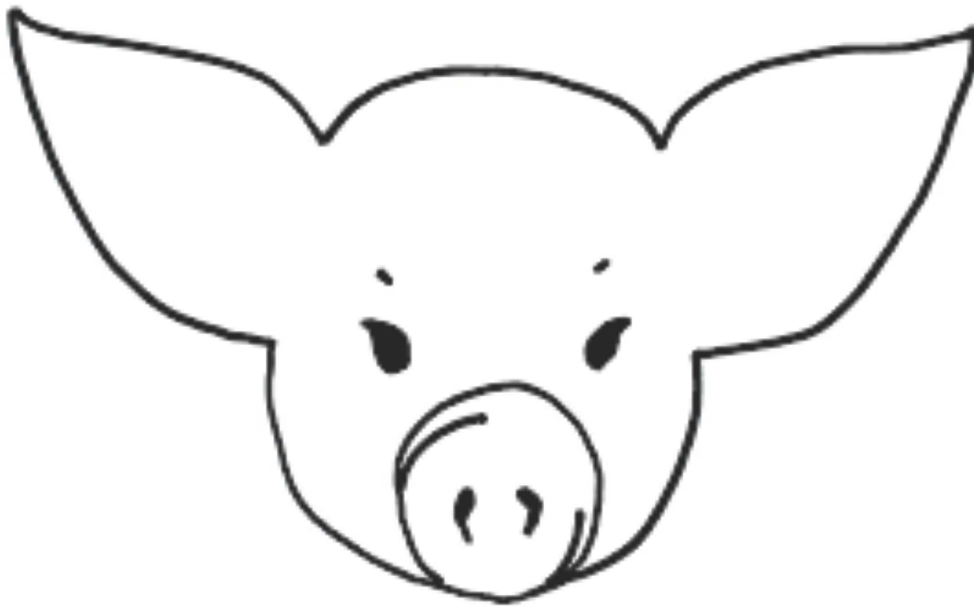
Can you figure out the litter and pig number of these two?



Left Pigs Ear Notch:

Right Pigs Ear Notch:

Now after looking at the examples up above, next time you are at the school farm look at your own pigs ear notching and draw it on the picture down below!



4h.missouri.edu

Housing & Bedding

Having the proper knowledge on what housing and bedding for swine is very important in having a successful market hog. In order to have a healthy pig you must keep their environment and bedding clean and dry. Being able to keep their environment clean and dry will eliminate your pig getting sick and getting mites or ringworm. Your swine advisor will be up at the school farm daily and as you are responsible for your pig and your pig's pen, they will be keeping an eye on your pens. If your pen is consistently dirty, there will be serious consequent—farm clean up days.

Flooring Types

Fully Slated (Plastic)



Advantages:

- Easy to wash and dry
- Allows for feces to fall through
- Quick drying times

Disadvantages:

- Impermeable
- More expensive than most flooring
- Can lead to sole bruising and cuts on piglets

Part Slatted

**Advantages:**

Provides a dedicated (soil) laying area
Better drainage than solid flooring

Disadvantages:

Solid area can quickly become messy, if not proper airflow
Pigs tend to have more cuts and sores than housed on solid floors

Solid (Concrete)

**Advantages:**

Predominantly used with straw
Cheap
Fewer issues with lameness than seen in pigs housed on slatted floors

Disadvantages:

Drainage can be a problem—slopes are important!
Concrete is very poorest, can be hard to clean
Concrete must be laid in appropriate weather conditions

<http://www.thepigsite.com/articles/4374/flooring/>

Bedding Options

Straw Bedding

Cornstalks and small straw are the most common types of bedding used for swine. Straw is both cheap and absorbent.



<http://www.thepigsite.com/articles/3510/bedding-options-for-the-english-pig-industry/>

Wood Shavings

Wood shavings are a great alternative to straw bedding. They are easy to access at any feed store and are cheap. They maintain their structure after wetting and are semi absorbent.



<http://www.thepigsite.com/articles/3510/bedding-options-for-the-english-pig-industry/>

Bedding Facts

- ❖ Pigs with bedding should remain clean. If pigs look dirty, its time to clean out the bedding
- ❖ Clean bedding should be used so that the surface underneath the bedding pack remains dry
- ❖ Bedding allows for pigs to alter temperature they experience
- ❖ Enough bedding should be used so that the surface underneath the bedding pack remains dry

Health & Well Being

Being observant and knowing what healthy behavior is normal and change of weight is important. When there is a change in behavior in any animal, it normally means they are trying to tell you something. It is very important that you know the common behaviors of pigs and if something is different, that can be a tell tale sign of sickness.

A Happy and Healthy Pig

- ❖ Clear, bright eyes
- ❖ No discharge from mouth, ears, eyes or anus
- ❖ Smooth skin and hair
- ❖ Will be bright and alert
- ❖ No lameness
- ❖ Will have an appetite
- ❖ Like human contact

* If you see a change in behavior/weight loss in your pig, REPORT it to your advisor ASAP!



<http://google.com/images/pigs>

Weight Log

Weighing your pig is very VERY important! It allows you and myself to keep tabs on your pig's average daily gain (~1.5-2 lbs. per day). Below is a pre-made weight log that you can use to keep track of your weight ins. Your swine advisor will be checking your weight log every week to make sure your pig is on track for fair! ☺

Week of Age	Date	Weight (lbs)	Average Daily Gain (lbs)	Average Daily Feed Intake (lbs)
10	March 7 th	47	X	X
11	March 14 th	56	1.5	4.2

Fair Check off List

Below is a checklist for you to use as a guideline when getting ready for fair! It is expected of you to have all of these things packed and brought to fair, as it is very important to be prepared and organized.

- ☐ Market swine
- ☐ Tack box
- ☐ Rags/old towels
- ☐ Shampoo and conditioning spray to wash your pig
- ☐ Show Brush
- ☐ Muck Boots
- ☐ Show stick, cane or “whip”
- ☐ Spray bottle
- ☐ Sponge
- ☐ Thank you note for your buyer at the auction
- ☐ FFA Jacket and Whites
- ☐ Feed—measure out amount of feed/per day and label
- ☐ Feed pan

*Congratulations! You have
successfully raised your first
market hog for the Mid-State
Fair!*

What you need to do next!

- ❖ In order to receive your fair check you must do three things:
 - Spend ATLEAST two hours up at the fair cleaning up, taking down equipment and cleaning/bleaching out your pig pen
 - Submit your final and updated copy of your record book to me
 - Bring in two copies of your thank you letters personally signed with two addressed envelopes
- ❖ Post Fair BBQ and Banquet
 - Once you have turned in all of your record book and thank you letters you will be allowed to come to the End of Fair BBQ and Banquet! Please feel free to bring parents and friends as we celebrate all the hard work and awards our FFA chapter received at fair!

<https://www.ffa.org/home>

Chapter Five

Summary, Recommendations, Conclusion

This chapter includes a summary of this entire project, recommendations for creating a handbook and a conclusion on the outcome of this project.

Summary

Within a FFA chapter, students have the opportunity to buy, raise and show a livestock project at their local fair. The purpose of this project was to create a handbook on market swine for novice FFA members. The intent of this handbook was to help guide novice FFA members through their first year raising a market hog. This handbook will have all the useful information that will give students the necessary information to succeed at raising a pig for their local fair. When the handbook is published and distributed, students will be able to know exactly what their teacher expects of them and how to correctly raise their livestock project. This handbook should be continually updated based on the teacher's preferences and the advancement of protocols and procedures.

Recommendations

Through out the creation of this handbook various challenges came up. Although most research, consulting with my panel of experts and compiling of information went smoothly, some issues arose in formatting and content. The following list shows recommendations to consider when recreating this senior project.

1. Consult with various agriculture teachers regarding revision ideas
 - a. Will help establish new ideas
 - b. Input will be essential to keeping the manual up to date
 - c. Reduce any confusion and allow new perspectives
2. Keep in mind the audience and the different ways students may learn
 - a. Include pictures and diagrams, along with descriptions of each picture
 - b. Limit amount of written text
 - c. Add a word bank with definitions
3. Organize the numerous information, diagrams and pictures used when putting together Chapter Four
 - a. Include URL's below the pictures
 - b. Will reduce possible plagiarism and give credit where it is due

Conclusion

This student handbook will hopefully aid as an educational resource for novice FFA members to be successful in raising their first market swine for their local fair. This handbook should increase their knowledge and aid in the raising of their livestock project. Novice FFA students should be gain the proper information and be able to know the proper market swine breeds, swine anatomy, house and bedding, and the behavior of a healthy pig after reading this handbook. While this handbook is mainly focused for novice FFA members, any student raising a market hog is allowed access to it. The main focus for this Senior Project was to provide novice FFA members with the resources needed to excel in raising their first market hog.

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Appendix A

How To Raise A Market Hog: Novice FFA Student Handbook

HOW TO RAISE A MARKET HOG

NOVICE FFA STUDENT HANDBOOK



<http://www.timescall.com/portlet/article/html/imageDisplay.jsp?contentItemRelationshipId=6146954>

NAME: _____

SCHOOL: _____

CHAPTER: _____

INSTRUCTORS: _____

Authors Note

Thank you so much for choosing this handbook to use for your Novice FFA students! I decided to do this as my senior project because after raising market hogs in FFA for 3 years, I learned the importance's of knowing the correct information and being on the same page with my advisor. Also, being on track to become an Agriculture teacher myself, I have come to realize just how busy Ag teachers schedules are and being able to hand out a swine "bible" to their students will help eliminate confusion and questions. Below I have included the main information for Novice FFA members will be expected to know that will guide them to succeed in raising their first market hog for fair. The subjects are; swine breeds, parts of the swine, ear notching, types of housing and bedding, health and welling, a weight log and what they need to bring to fair.

I hope you find this handbook to be successful for you and your students and find the information useful. Have a great fair season ☺

The editor,
Amelia Brown

Introduction

Welcome to the 2016 Swine Group! First off, I would like to congratulate you all on qualifying to raise your first market hog for the California Mid-State Fair! Your “Swine Bible” is going to provide everything you will need to know in order to raise a market hog for the fair! DO NOT LOOSE THIS HANDOUT! Below is a list of everything that will be in this handbook so you can easily look up everything! It is your responsibility to keep up with your projects health and weight gain but if you have any questions, make sure you inform your advisor ASAP.

- I. Swine Breeds
- II. Parts of a pig
- III. Ear notching
- IV. Housing and bedding
- V. Health and Well being
- VI. Weight goals and Weight Log



<http://kids.nationalgeographic.com/animals/pig/#pig-babies-feeding.jpg>

Primary Market Swine Breeds

Below are the 7 main types of market swine breeds you will see at the fair. By each picture, there is a small description of each breed. You must read through these and make sure you can learn and identify each breed, INCLUDING YOUR OWN, before you start showmanship practices! ☺

Yorkshire: The Yorkshire is one of the most recorded breeds in the United States. They are known for their good mother lines and are very sound and durable. They are white in color and have erect ears. They also are very muscular with low back fat.



<http://www.thepigsite.com>

Hampshire: Known as one of the most important breeds. Their coloring is black with a white stripe that goes around their shoulder blades. They are widely used as the sires for many cross breeding and are known for their lean meets and carcasses.



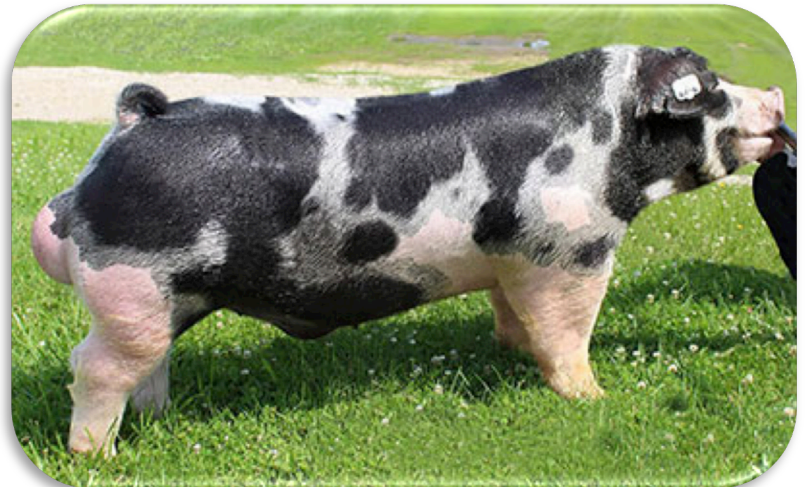
<http://www.nottshowpigs.com>

The Duroc: These pigs are known as the “red pigs” and are the second most recorded swine breed in the U.S. They have drooping ears and grow very easily. They are very durable and their muscle qualities are high and their feed efficiency is good.



<http://www.thepigsite.com>

The Gloucestershire Old Spot: Also known as the “spotted pig” are known for their clearly defined black spots and white skin and long droopy ears. They have a broad body with normally large hams. The spotted pig is known for their fine carcass which helps produce top quality meat.



<http://www.hurdshowpigs.com>

The Landrace: Very similar in the colors and build of a Yorkshire, the Landrace has a long body with large and heavy ears that are carried close to the face. The skin of a Landrace must be white with little spotting and discoloration.



The Chester White: The Chester White bred is used mostly as meat pigs and are exercised in the use of crossbreeding. This breed is very durable and has a fair colored skin, lighter than the Yorkshire and landrace. Their eyes are slightly droopy but significantly smaller than the landrace.



<http://armstronggenetics.com/winners>.

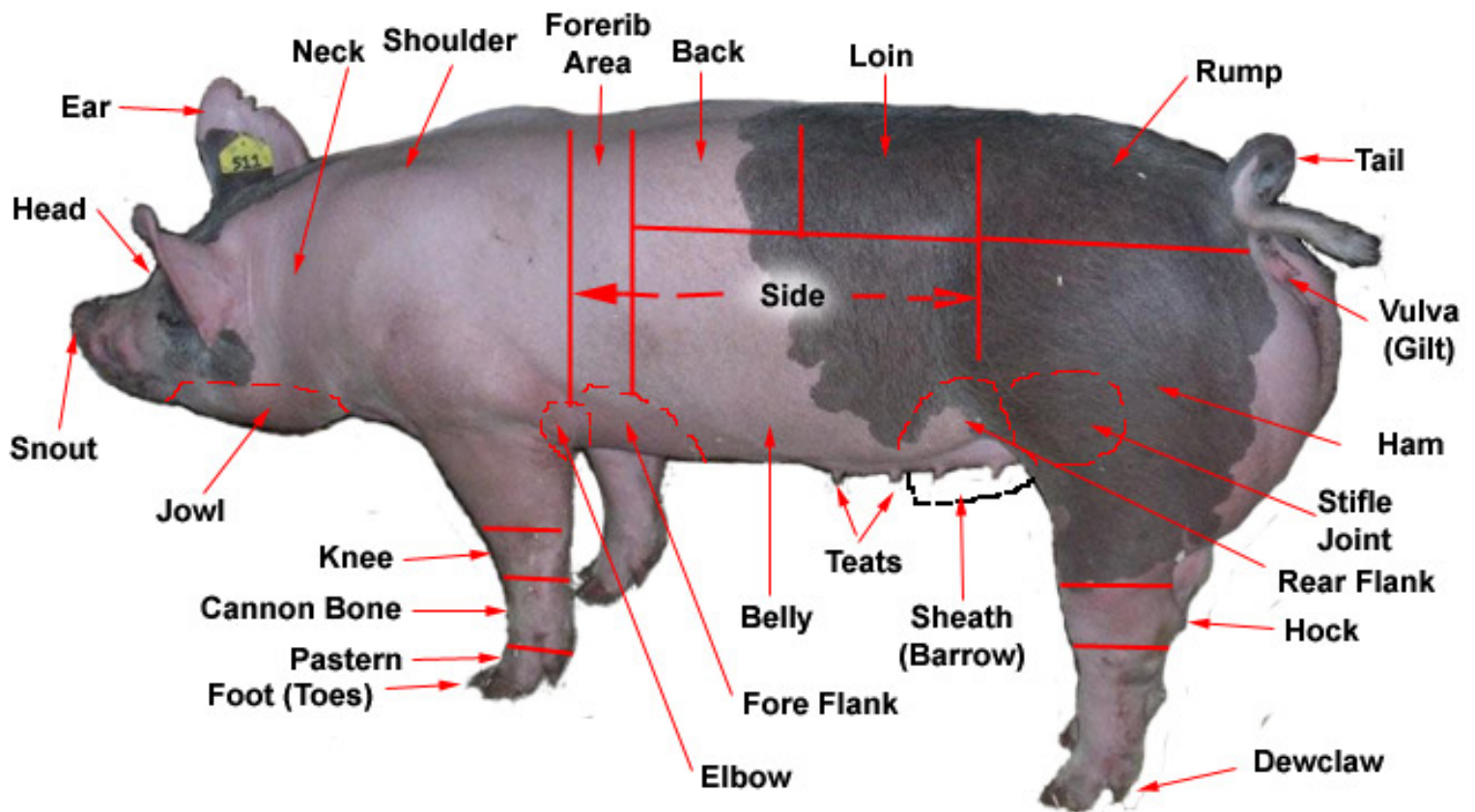
The Crossbred: A crossbred pig or otherwise known as a “blue butt” shown by the blue spots on this pig's ham, are a cross between two other breeds of hogs. Crossbreeds can have all different appearances and will be the most common type of pig when it comes to showing at the fair. They can take on the best traits from different breeds.



<http://harrellfamilyfarm.com/>

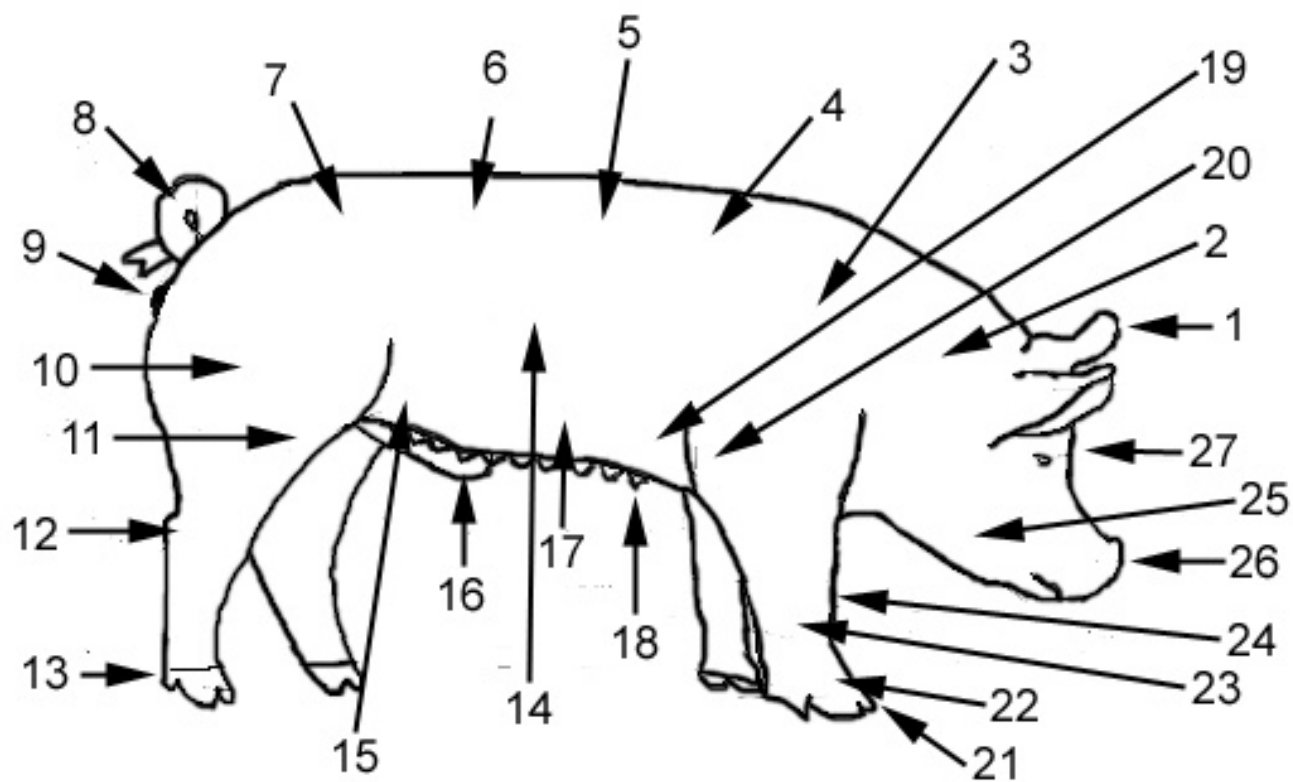
Parts of a Pig

This next section is very important! Below, there are two different pictures to help you learn the parts of the pig. When raising your own market swine for the fair, you will be expected to know the parts of your animal. If you don't know the parts of your project, how will you know which areas to focus on and how to describe something if you don't know the real term for the body part. You will be testing you in class on the parts of the pig with in the next few weeks so you should take some time to learn the body parts of your hog!!



http://www.geauga4h.org/swine/swine_body.htm

This picture has all of the necessary information on the parts of the pig!



http://www.geauga4h.org/swine/swine_body.htm

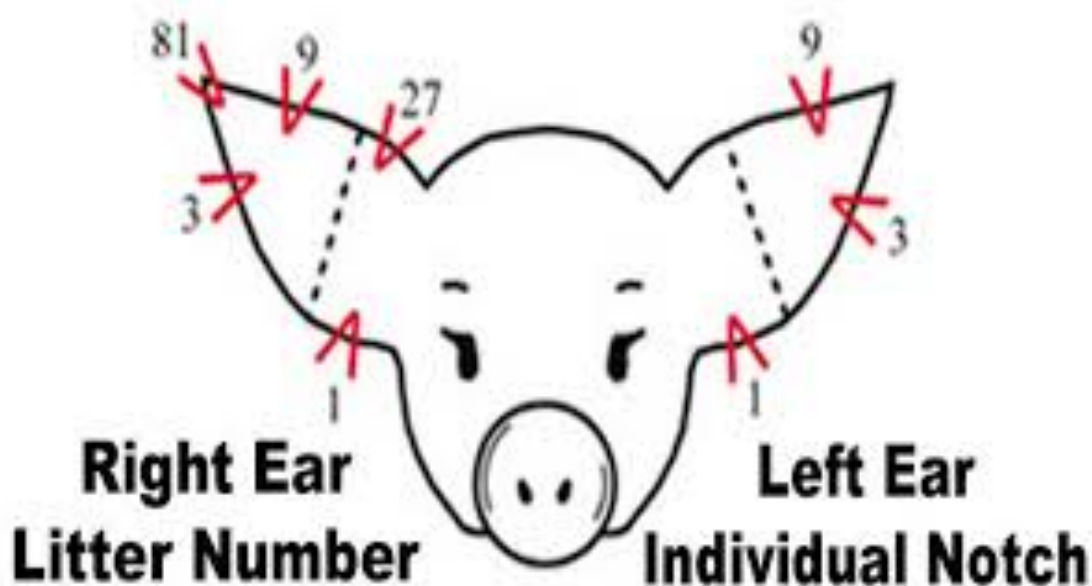
Here is a perfect way to study the parts of a pig! Below try to label all 27 parts without looking!

- | | |
|-----|-----|
| 1. | 15. |
| 2. | 16. |
| 3. | 17. |
| 4. | 18. |
| 5. | 19. |
| 6. | 20. |
| 7. | 21. |
| 8. | 22. |
| 9. | 23. |
| 10. | 24. |
| 11. | 25. |
| 12. | 26. |
| 13. | 27. |
| 14. | |

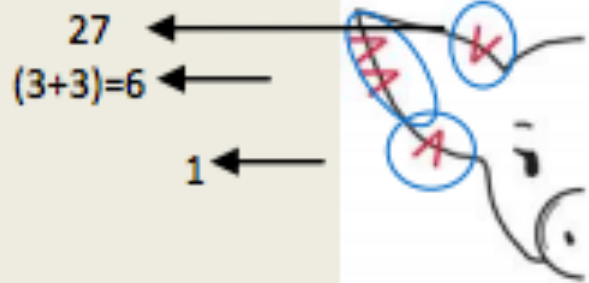
Ear Notching

Ear Notching is very important! It is done on newborn pigs so the breeder can use it as identification. When it comes time for you to pick out your own pig, it is very important to know how to read the ear notching on the piglets so you can tell the breeder which one you want to buy. The pig's right ear is used for the litter number, while the left ear is used to show individual identification for each pig in the litter. When reading the ear notch you read the right ear (litter number) then the left ear (individual identification number). Also, the higher you advance in showmanship—intermediate and advance, you will be expected to know this for questioning.

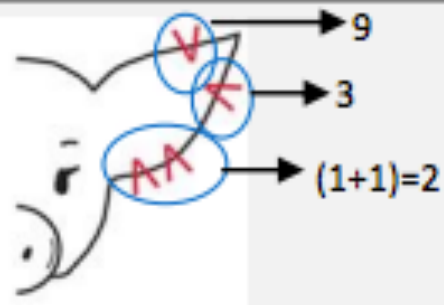
UNIVERSAL EAR NOTCHING SYSTEM



<http://cpsswine.com/universal-ear-notching-system/>

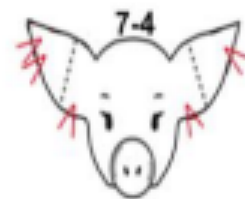
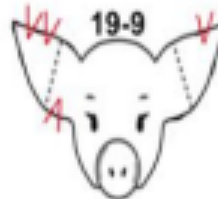
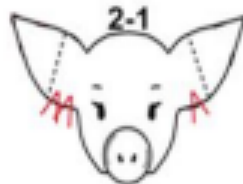
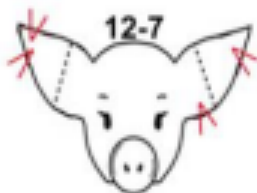


Example: Litter number
 $(27+6+1)=34$



Example: Pig number
 $(9+3+2)=14$

More Examples: (Litter number-Pig Number)



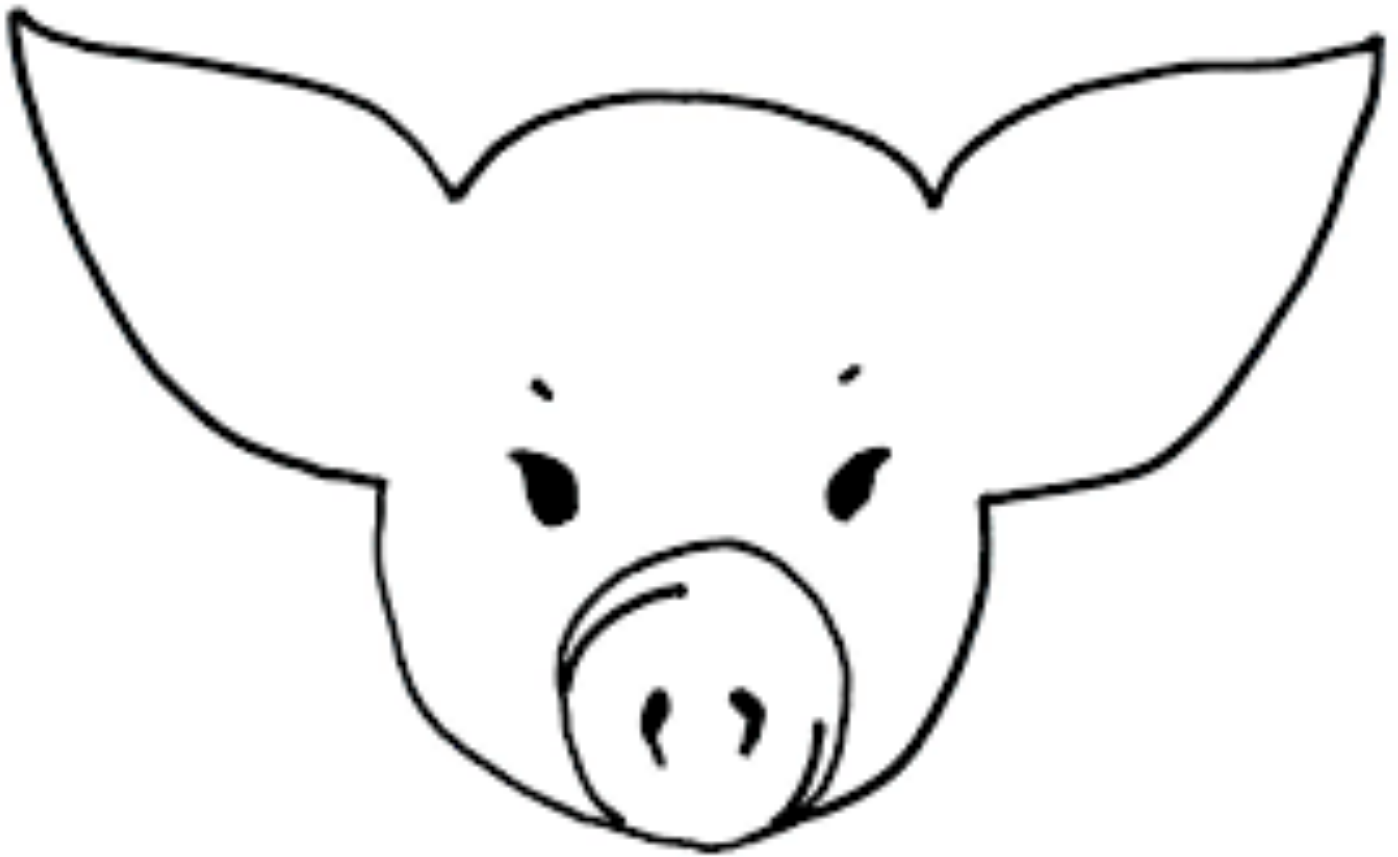
Can you figure out the litter and pig number of these two?



Left Pigs Ear Notch:

Right Pigs Ear Notch:

Now after looking at the examples up above, next time you are at the school farm look at your own pigs ear notching and draw it on the picture down below!



Housing & Bedding

Having the proper knowledge on what housing and bedding for swine is very important in having a successful market hog. In order to have a healthy pig you must keep their environment and bedding clean and dry. Being able to keep their environment clean and dry will eliminate your pig getting sick and getting mites or ringworm. Your swine advisor will be up at the school farm daily and as you are responsible for your pig and your pig's pen, they will be keeping an eye on your pens. If your pen is consistently dirty, there will be serious consequent—farm clean up days.

Flooring Types

Fully Slated (Plastic)



Advantages:

- Easy to wash and dry
- Allows for feces to fall through
- Quick drying times

Disadvantages:

- Impermeable
- More expensive than most flooring
- Can lead to sole bruising and cuts on piglets

Part Slatted



Advantages:

Provides a dedicated (soil) laying area
Better drainage than solid flooring

Disadvantages:

Solid area can quickly become messy, if not proper airflow
Pigs tend to have more cuts and sores than housed on solid floors

Solid (Concrete)



Advantages:

Predominantly used with straw
Cheap
Fewer issues with lameness than seen in pigs housed on slatted floors

Disadvantages:

Drainage can be a problem—slopes are important!
Concrete is very poorest, can be hard to clean
Concrete must be laid in appropriate weather conditions

Bedding Options

Straw Bedding

Cornstalks and small straw are the most common types of bedding used for swine. Straw is both cheap and absorbent.



<http://www.thepigsite.com/articles/3510/bedding-options-for-the-english-pig-industry/>

Wood Shavings

Wood shavings are a great alternative to straw bedding. They are easy to access at any feed store and are cheap. They maintain their structure after wetting and are semi absorbent.



<http://www.thepigsite.com/articles/3510/bedding-options-for-the-english-pig-industry/>

Bedding Facts

- ❖ Pigs with bedding should remain clean. If pigs look dirty, its time to clean out the bedding
- ❖ Clean bedding should be used so that the surface underneath the bedding pack remains dry
- ❖ Bedding allows for pigs to alter temperature they experience
- ❖ Enough bedding should be used so that the surface underneath the bedding pack remains dry

Health & Well Being

Being observant and knowing what healthy behavior is normal and change of weight is important. When there is a change in behavior in any animal, it normally means they are trying to tell you something. It is very important that you know the common behaviors of pigs and if something is different, that can be a tell tale sign of sickness.

A Happy and Healthy Pig

- ❖ Clear, bright eyes
- ❖ No discharge from mouth, ears, eyes or anus
- ❖ Smooth skin and hair
- ❖ Will be bright and alert
- ❖ No lameness
- ❖ Will have an appetite
- ❖ Like human contact

* If you see a change in behavior/weight loss in your pig, REPORT it to your advisor ASAP!



Weight Log

Weighing your pig is very VERY important! It allows you and myself to keep tabs on your pig's average daily gain (~1.5-2 lbs. per day). Below is a pre-made weight log that you can use to keep track of your weight ins. Your swine advisor will be checking your weight log every week to make sure your pig is on track for fair! ☺

[illegible]

Fair Check off List

Below is a checklist for you to use as a guideline when getting ready for fair! It is expected of you to have all of these things packed and brought to fair, as it is very important to be prepared and organized.

- ☐ Market swine
- ☐ Tack box
- ☐ Rags/old towels
- ☐ Shampoo and conditioning spray to wash your pig
- ☐ Show Brush
- ☐ Muck Boots
- ☐ Show stick, cane or “whip”
- ☐ Spray bottle
- ☐ Sponge
- ☐ Thank you note for your buyer at the auction
- ☐ FFA Jacket and Whites
- ☐ Feed—measure out amount of feed/per day and label
- ☐ Feed pan

**Congratulations! You have
successfully raised your first
market hog for the Mid-State
Fair!**

What you need to do next!

- ❖ **In order to receive your fair check you must do three things:**
 - **Spend ATLEAST two hours up at the fair cleaning up, taking down equipment and cleaning/bleaching out your pig pen**
 - **Submit your final and updated copy of your record book to me**
 - **Bring in two copies of your thank you letters personally signed with two addressed envelopes**
- ❖ **Post Fair BBQ and Banquet**
 - **Once you have turned in all of your record book and thank you letters you will be allowed to come to the End of Fair BBQ and Banquet! Please feel free to bring parents and friends as we celebrate all the hard work and awards our FFA chapter received at fair!**