Volusia County Fair Youth Livestock Swine Record Book

This Record Book was adapted from the Florida State Fair Youth Livestock Record Book.

Exhibitor Name   Age

4-H Club, FFA Chapter, or Independent:

I hereby certify that as the exhibitor of this project, I have personally been responsible for the care of this (these) animal(s), have personally kept records on this project, and have personally completed this record book.

Exhibitor's Signature   Date

I/We, the parents certify that our son/daughter has <u>completed</u> this project and <u>completed</u> this record book and will comply with all the Rules and Regulations of this show.

Parent/Guardian Signature   Date

This student is an active member of the _____FFA Chapter / 4-H Club, and is eligible to show livestock at the Volusia County Fair. I verify that this record book has been completed by the student, and is an accurate representation of the project.

FFA Advisor's/ 4-H Leader Signature   Date

Revised 6/15/2023

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PURPOSE

THE PURPOSE OF A LIVESTOCK YOUTH PROJECT IS TO ACHIEVE THE FOLLOWING:

1. To acquire an understanding of animal production by preparing for, purchasing, caring for, and keeping records on one or more animals.
2. To be able to identify the types and grades of animals and employ efficient methods of marketing.
3. To understand the business aspects and economics of purchasing animals, feeds, facilities, and equipment for an animal project.
4. To develop integrity, sportsmanship, and cooperation.
5. To develop leadership abilities, build character, and assume citizenship responsibilities.

It is very important that every section of this record book be complete and accurate. If you choose to not complete any section of this record book, you will not receive a ribbon. However, your score will still be added to your premium point total.

DRUG STATEMENT

I HEREBY CERTIFY THAT ANY DRUG, ANTIBIOTIC OR BIOLOGICAL SUBSTANCE WHICH MAY HAVE BEEN ADMINISTERED BY MYSELF, OR ANY OTHER PERSON, WAS DONE SO IN STRICT COMPLIANCE WITH THE MANUFACTURERS= LABEL REQUIREMENTS OR AS PRESCRIBED BY A VETERINARIAN.

_____
Signature of student

_____
Signature of parent/guardian

Youth Livestock General Record Book Guide Lines

It is suggested that a copy of the record book be made for use as a work copy. Records can then be transferred into this book for a final copy.

1. Your Record Book should start as of June 1, of the current calendar year, or when the animal was purchased, if after June 1.
2. Record Books can be completed on animals being shown or can reflect all animals owned with a note identifying animals being shown.
3. The only item that you should submit at check in is the record book. Please do not make it a scrapbook. Do not take pages apart.
4. Do not put record book in a binder. If you add pages, staple or tape them in place.
5. Always double check your work, especially your math calculations.
6. Have someone check your project story for spelling and grammar before you write it in the final record book.
7. Your final record book should be **hand** written by the exhibitor.

Project Terms and Explanations

PROJECT YEAR - Based on a calendar year. Current project year is same year as current Fair.

Notes for Project Inventory (page 4):

1. **Acquired** - List the date you obtained this item, on items older than 1 year, the year will be sufficient.
2. **Purchase cost or value** - What did this item cost when you obtained it? (Fair market value)
3. **Value at Beginning of Project**- Same as purchase cost for items purchased current calendar year. On items from previous years this should be the value from last year=s ending inventory or depreciated value of 10% of purchase cost per calendar year.
4. **Depreciation of 10%** - This will be 10%, per project year, of the original purchase cost for the items you will still have at the end of the project. This includes items you had at the beginning of the project as well as items purchased during the current calendar year. Depreciation is the loss in value of your assets and is an expense.
5. **Value at the end of the project**- This is the value at the beginning of the project minus the depreciation.

Examples:

Items Description	Acquired	Purchase Cost or Value	Value at beginning of project	Depreciation (10% of purchase cost, for this calendar year)	Value at end of project
Rope	Purchased 4 years ago	5.00	(Depreciated 10% for 3 years) 3.50	.50	3.00
Comb	Purchased 3 years ago	5.00	(Depreciated 10% for 2 years) 4.00	.50	3.50
Brush	Purchased previous calendar year	5.00	(Depreciated 10% for 1 year) 4.50	.50	4.00
Bucket	Purchased current calendar year	5.00	(No Previous Depreciation - purchased current project year) 5.00	.50	4.50
Total Depreciation*		XXXXXX	XXXXXXXXXXXX	2.00	XXXXX
Value of Project Assets		XXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	15.00

*Depreciation is an expense

PROJECT INVENTORY

List all equipment and assets you had at the beginning of the project. After listing existing inventory, you should also list those items you purchased this year that you will keep after the project is finished. **List items you will keep past the end of this project on this page only** (inventory examples include clippers, blowers, chutes, tack, etc.) Do NOT list expendable items such as shampoo, etc. **Refer to Project Terms and Explanation, page 3, for descriptions of each column**.

Item Description	Acquired	Purchase Cost or Value A	Value at beginning of project B	Depreciation (10% of purchase cost, per calendar year) C	Value at end of project D
Comb	*Purchased previous year*	*6.00*	*5.40*	*.60*	*4.80*
Brush	*Purchased current year*	*4.00*	*4.00*	*.40*	*3.60*
Total Depreciation (Depreciation is an expense)	**XXXX**	**XXXX**	**XXXX**		**XXXXXX**
Value of Project Assets	**XXXX**	**XXXX**	**XXXX**	**XXXXXXXX**	

PROJECT <u>ANIMAL</u> INVENTORY..

List all animals you own at the beginning of the project and add any animals you purchase or animal(s) born during the project year. Animals sold during the year should be recorded under OTHER INCOME. Animals sold should have a $0 value at end of project for this page.

**Beginning $ Value: Value of existing animals at beginning of project OR purchase cost of new animals OR value of animal(s) born.

*$ Value at end of project: Your animal's value should increase and is an estimated value

Animal Description: (Animal number and/or Name)	Breed	Sex	Date Acquired	Date Born	Beginning $ Value**	$ Value at end of project	Indicate if animal sold, kept, died, etc.
Value at Beginning	XXX	XX	XXXXX	XXX		XXXXX	XXXXXX
Value at End/ Value of Animal Assets	XXX	XX	XXXXX	XXX	XXXXX		XXXXXX

NON-FEED EXPENSES..

List everything that you spend money for that you will NOT have at the end of the project and that is NOT feed or hay. This includes entry fees, veterinary expenses, bedding, and other expendable items such as shampoo, shoe polish, hair spray, photo expense, etc.

LIST ITEMS YOU WILL KEEP PAST THE END OF THIS PROJECT ON THE PROJECT INVENTORY PAGE ONLY (inventory examples include clippers, blowers, chutes, tack, etc.)

Date	Description	Paid To	Total Cost
Total Non-Feed Expenses		XXXXXXXXXXXXXXXXXXXXXXXX	

FEED EXPENSES..

List all feed and hay expenses on this page (list each feed purchase separately). List all weights of feed including weight of hay.

Date	Description	Paid To	Pounds	Total Cost
Total Feed Expenses		XXXXXXXXXXXXXXXXXXXXXXXX	XXXXX	

OTHER INCOME...

Other project income should be recorded here, such as, sale of project animals, show premiums or other money earned. **If you have no other income from this project prior to the show, <u>THEN ENTER ZERO</u>**. Do Not "X" out.

Date	Description	Total
	Total other income, if none, enter zero	

SPONSOR INCOME...

You should record here any money given to you, to support your project, by sponsors..
Do Not Turn in Your Money - You are responsible for collecting monies pledged.
<u>IF NONE, ENTER ZERO.</u> Do Not "X" out.

Sponsor's name	Total
Total Sponsor income, if none, enter zero	

PRODUCTION INCOME:

For projects where product is sold. Keep track of the income generated from products from your project (ie: milk, eggs, wool, etc.). Do Not "X" out.

Date/Month	Product	Product sold to	Total
		Total Value of Product Sold, if none, enter zero	

Health Record...

This should include a record of any health related activities (deworm, vaccinate, or use of veterinarian-s services for any other reason). This should include what you used, how much you used, and what you used it for. Include well animal care (such as health certificate). Fill in all applicable information. If animal healthy throughout project, make note of that. Do Not "X" out.

Date	Description of activity	Product used	Dosage	Withdrawal Time

Project Summary

The records in this book cover my livestock project which consist of (number of animals):
(Circle one) 1, 2, 3, 4, 5, 6, 7, 8, 9, or _____ animals.
Is this an on going Breeding/Production project?   Yes _____ No _____

Income:

Other Income:	(From page 8) _____	1
Sponsor Income:	(From page 8) _____	2
Production Income:	(From page 9) _____	3

TOTAL PRELIMINARY INCOME (Line 1+2+3) _____ 4

Expenses:

Total Depreciation:	(From page 4) _____	5
Total Non Feed Expenses:	(From page 6) _____	6
Total Feed Expenses:	(From page 7) _____	7

TOTAL EXPENSES (Line 5+6+7) _____ 8

Change in animal Inventory:

Value at End	(From page 5)	_____ 9
Value at Beginning	(From page 5)	_____ 10

Net change in Animal Inventory (Line 9 - 10) _____ 11

SUMMARY:

Preliminary Profit/Loss (Line 4 - Line 8) + Line 11 _____ 12

The following four lines(Lines 13, 14, 15 & 16) will be filled in after the Fair.

Animal Premiums (To be filled in after the Fair)   _____ 13

Achievement Monies (To be filled in after the Fair)   _____ 14

Add on monies (If any)   _____ 15

FINAL <u>PROFIT OR LOSS</u>   (Line 12 + 13 +14 + 15) _____ 16

ASSETS:

Value of Project Assets	(From page 4)	_____ 17
Value of Animal Assets	(From page 5)	_____ 18

Total Assets   (Line 17 + 18) _____ 19

PICTURES OF YOUR PROJECT..

Show the beginning and end of your project along with two different skills that you have learned. This should include a **minimum of 5 pictures and a maximum of 8 pictures**. Include a caption with each photo. The captions should tell a story. Explain what you are doing and why you are doing the things shown in the picture. What skills are you demonstrating and why? Spelling and grammar are included in the judges decision. Captions should be a complete sentence. <u>Do Not</u> start a caption with "Here I am…", "This is me…", "In this picture…"

PICTURES (continued):

PICTURES (continued):

PROJECT ESSAY

Your essay will relate to this years' skilathon topic. Since the topic changes each year, check our website for essay prompt assigned to your age category. Be sure to use correct grammar, spelling and punctuation in your writing.

_____

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PROJECT ESSAY (Continued):

Livestock Knowledge

This year's knowledge test topic is "reproduction". Knowledge of reproductive management is essential to breeding livestock and enhancing genetics. Questions were developed based on the 2024 Florida State Fair Skillathon Manual. Points from your knowledge test will be accounted for in your overall record book score.

To answer these questions, you will need to use resources such as:
- Club leader/FFA advisor
- Florida State Fair 2024 Skillathon Manual: https://floridastatefair.com/ag/
- Research-based online sources such as ".edu" or ".org" websites

Youth only need to complete the pages designated for their age division.

Juniors: pages 17-19

Intermediates: pages 17-21

Seniors: pages 17-22

Images and questions adapted from the Florida State Fair Skillathon Manual.

Swine Skillathon
Breed Identification

Breeding sows and boars are selected for traits that are considered economically important. A *purebred* animal is one that has the characteristics defined by the breed registry and purebreds are expected to pass those traits on to their offspring with a high degree of predictability. When animals of different breeds are mated, we call it *crossbreeding*. The resulting offspring often outperform the parents due to a phenomenon call *hybrid vigor*. Though most of the swine industry uses crossbreeding systems, it is still important to consider the purebred animals that contributed the genetics to the composite crosses we see today. Some breeds of swine and their descriptions are listed below. In general, white breeds are considered strong in maternal traits and colored breeds are considered strong in carcass traits.

Directions: Use the word bank below to write in the breed that matches with the photograph and description listed below.

Word Bank:		
Chester White	Duroc	Poland China
Berkshire	Hereford	Hampshire
Yorkshire	Landrace	Spotted

provided by National Swine Registry
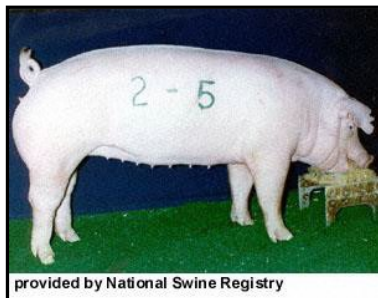
_____:
These animals have white bodies and medium-sized, droopy ears. They were developed in Pennsylvania and are very good mothers.

provided by National Swine Registry
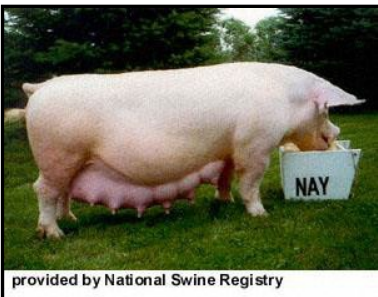
_____:
This breed has long, large-framed, white bodies with erect ears. They produce large litters and are good mothers. This breed is known as the "mother" breed.
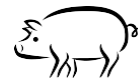

_____:
Coming from England, these animals have black bodies with white feet, tails, and faces. They have dish snouts and short, erect ears.

provided by National Swine Registry

_____:
Coming from Denmark, this breed has very long, white bodies and very large, floppy ears. They are also good mothers
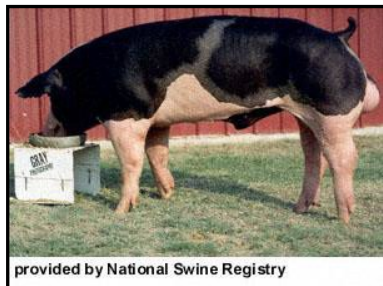
provided by National Swine Registry

_____:
These animals have light red to dark red bodies and droopy ears. They came from crosses between red hogs in New York and red hogs in New Jersey. They grow quickly and efficiently.

provided by National Swine Registry

_____:
Developed in England, these animals have black bodies with a white belt around the shoulders and both front legs. They also have erect ears and heavy muscles.

provided by National Swine Registry

_____:
This breed has black and white spotted bodies and droopy ears. They gain weight easily and are aggressive breeders.

_____:
The members of this Ohio breed have black bodies with six white points. The white points are their four legs, tail and nose. They have droopy ears and are lean with heavy muscles.
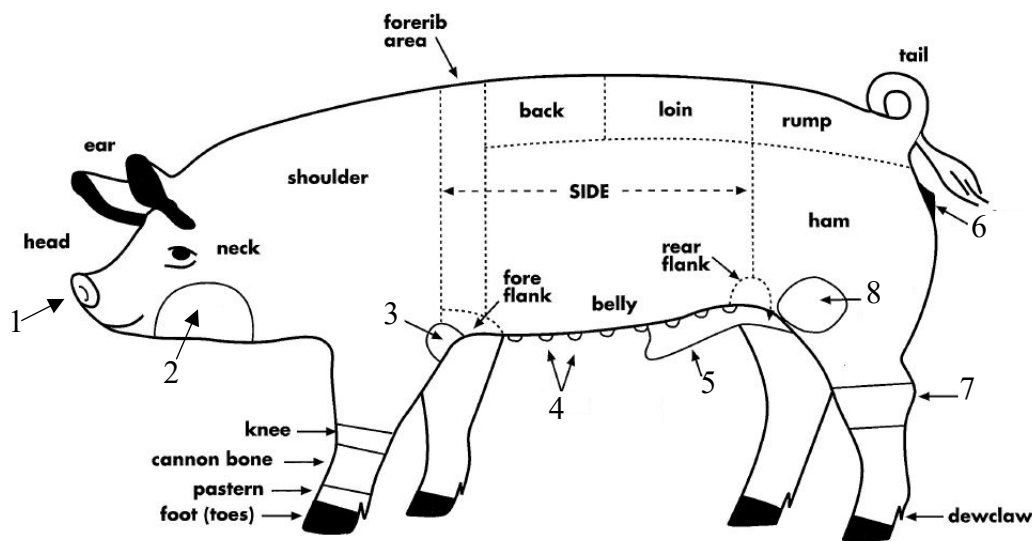

_____:
Developed in the early 1900s in Missouri, Iowa, and Nebraska, Herefords are a relatively new breed. Animals must have a white face with at least two white feet. They must be red in color. The shade of red may vary from light to dark, but a deep red color is preferred. Face is medium length with a slight dish, ears are medium size and droop.

Adapted from Swine Learning Laboratory Kit, The Ohio State Univ. Agric. Education Curriculum.
http://www.ansi.okstate.edu/breeds/swine/

Selection: Visual Evaluation

Directions: Using the word bank below write in the word that matches the body part of the swine.

forerib area

tail

back   loin   rump

ear

shoulder   SIDE

head   neck   ham

fore flank   rear flank   6

belly   8

3   fore flank   5   7

knee

cannon bone

pastern

foot (toes)   dewclaw

1
2
3
4
5
6
7
8

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

Word Bank:

Vulva	Teats	Sheath
Jowl	Hock	Stifle Joint
Elbow	Snout	

Criteria for Selection Using Visual Appraisal

The criteria listed in the word bank below are commonly considered most important in visual evaluation. The priority or emphasis placed on each may change with market demand, breed, age, management scenario and performance data.

Directions: Using the word bank below fill in the table. Think about what is most important vs. least important when visually evaluating market and breeding swine.

Remember:

Structure = correct   **Fat** = less is better   **Volume** = more is better   **Muscling** = more is better

	Most important ⟶ Least Important				
Boars					
Gilts					

Word Bank:

Structure	Volume	Pounds
Muscling	Fat	

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Swine Skillathon
Reproduction: Intermediates & Seniors

Directions: Using the word bank, fill in the blanks below.

> **Word Bank**: Ovulation, farrowing, gestation, fertilization, copulation.

Sexual reproduction begins with the boar and sow mating, called _____. This occurs during the time period (*estrus* or heat) when the sow will accept the boar for copulation or breeding. The boar deposits *sperm* in the reproductive tract of the sow. _____ is the release of the egg cells from the ovaries of the sow. _____ is the union of the sperm and the egg cells. The number of young a sow gives birth to at one time is an indication of the number of egg cells released and fertilized by sperm. The _____ period is the time during which the sow is pregnant (approximately _____ days) and *parturition* is the process of giving birth and is called _____.

Gender Names and Terminology

Directions: Write the letter on the line that matches the term or item to its description.

1. Young swine:_____   A. Boar

2. Young female: _____   B. Piglet

3. Mature female: _____   C. Barrow

4. Intact Male: _____   D. Gilt

5. Castrated male: _____   E. Sow

6. Artificial Vagina: _____

7. Ultrasound Machine: _____

8. Artificial Vagina: _____

9. Insemination Catheter: _____

10. Thermos: _____

11. Semen Tank: _____

I.


F.

J.

K.

G

H.

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Reproductive Anatomy

Swine give birth to litters of piglets (more than one at each birthing) and may have more than one litter each year. The way an animal reproduces determines the type of reproductive tract it has. Understanding reproductive anatomy is basic to managing reproduction.

Directions: Questions 1-8, match the reproductive anatomy to the correct term. Questions 9-12, write in the correct anatomical term.

Male Anatomy
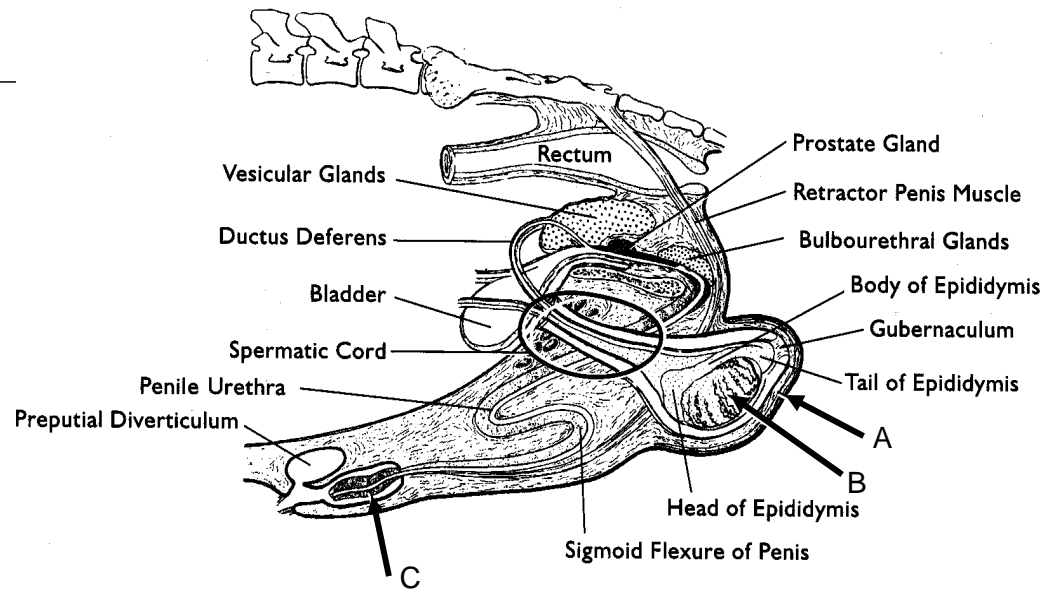
1. Mammary Glands: _____

2. Ovary: _____

3. Uterine Horn: _____

4. Oviduct: _____

5. Scrotum: _____

6. Testis: _____

7. Vagina: _____

8. Glans Penis: _____

Prostate Gland
Retractor Penis Muscle
Bulbourethral Glands
Body of Epididymis
Gubernaculum
Tail of Epididymis
A
B
Head of Epididymis
Sigmoid Flexure of Penis
Rectum
Vesicular Glands
Ductus Deferens
Bladder
Spermatic Cord
Penile Urethra
Preputial Diverticulum
C

9. _____: Paired male gonads that produce the sperm cells and the male sex hormone, testosterone.

10. _____: A thick-walled tube with an irregular passageway that serves as a valve between the outside organs and the delicate inner organs.

11. _____: The paired female gonads that produce eggs and hormones.

12. _____: The free end of the penis containing sensory nerves and the opening of the urethra. A boar's is shaped like a corkscrew.
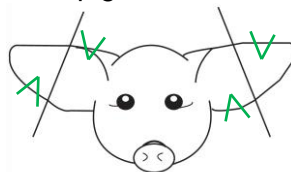
Female Anatomy

Rectogenital Pouch
Rectum
H
G
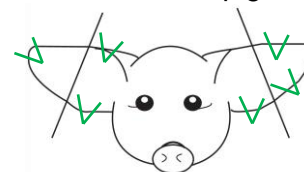Cervix
Bladder
D
F
Pelvis
Urethra
E

21
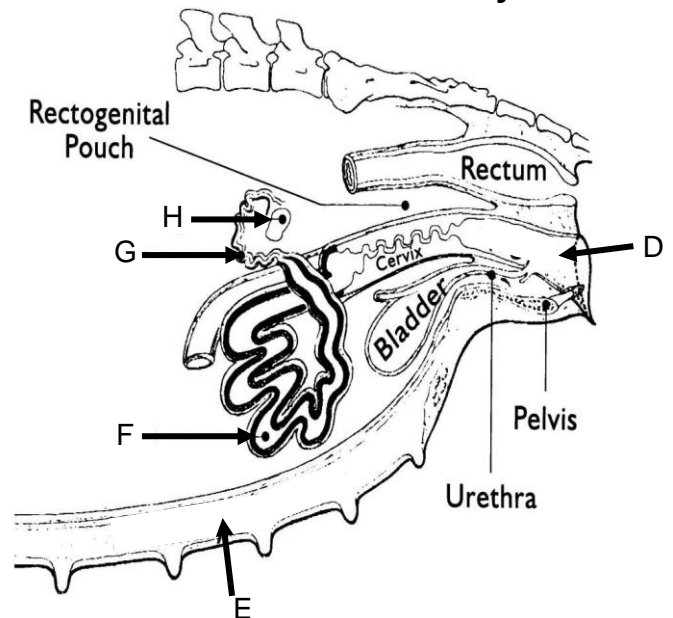
Ear Notching

Directions: Ear notching is done as a method of identification. There are many different systems that can be used. Correctly label the three piglets below with their litter number and pig number.
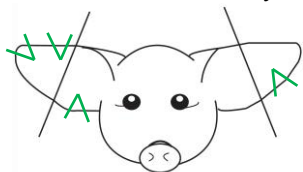
1. _____   2. _____   3. _____

Expected Progeny Differences (EPDs)

EPDs estimate how future progeny of an animal will compare to progeny of other animals within a breed and are computed in the units of the trait being measured. EPDs are based on an animal's performance along with measures of the performance of an animal's relatives, including ancestors, siblings and progeny. When comparing EPDs for selections, always keep in mind the situation or scenario in which the animals are to be used. Desirable EPD's may be positive or negative. For example, positive EPDs are more desirable for number born alive, 21-day litter weight, and pounds of lean. Negative EPDs are more desirable for days/250 and backfat.

Directions: Use the EPD table below. Write the letter A, B, C, or D for the boar you select to answer each question.

Boar	Number Born Alive (NBA)	21-Day Litter Weight (LWT)	Days to 250	Feed/Gain (FG)	Backfat (BF)	Loin Eye Area (LEA)	Pounds of Lean (PL)
A	+0.6	+1.3	-2.1	-0.05	0.00	+0.2	+0.1
B	-0.3	+4.2	-3.1	-0.12	-0.05	-0.4	+0.8
C	+0.5	+3.2	-3.6	+0.08	+0.01	+0.8	+2.4
D	+0.2	-3.0	+0.1	+0.21	+0.02	+0.5	-0.3

1.   Which boar's offspring will be the fattest? _____

2.   Which boar's female offspring will farrow the fewest live piglets? _____

3.   Which boar's offspring will be the heaviest muscled? _____

4.   Which boar's offspring will have the poorest growth rate? _____

5.   Which boar's offspring will likely produce the most pigs over their lifetime? _____

6.   Which boar's offspring will have the worst feed efficiency? _____

7.   Which boar's pigs will have the lowest percentage carcass fat-free lean? _____

8.   Which boar's pigs will produce the largest pork chops? _____

Adapted from: University of Kentucky College of Agriculture, Food and Environment.
https://afs.ca.uky.edu/livestock/test-your-knowledge/EPDs

SCORING SYSTEM
Youth General Record Book

Section	Points Possible
1. Signatures (Cover)	3
2. Drug Statement (Page 2)	2
3. Project Inventory (page 4)	6
4. Project Animal Inventory (page 5)	6
5. Non Feed Expenses (page 6)	6
6. Feed Expenses (page 7)	6
7. Other Income/Sponsor Income /Production Income (page 8 & 9)	2
8. Health record (page 9)	2
9. Project Summary (page 10)	12
10. Pictures (pages 11-12 -13)	10
11. Project essay (page 14 - 15)	15
12. Neatness & Accuracy	15
13. Reproductive Knowledge	15
Total Points	100

Ribbon Awards

Blue   90 - 100 pts.
Red   80-89 pts.
White   70 - 79 pts.
Participation Ribbon   69 pts. and below

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