



CIRCLE ONE:

Market

Breeding

Exhibitor Age on  
Sept. 1:

# Volusia County Fair

## Youth Livestock

## Beef 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:	
<p>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.</p>	
Exhibitor's Signature	Date

<p>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.</p>	
Parent/Guardian Signature	Date

<p>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.</p>	
FFA Advisor's/ 4-H Leader Signature	Date
Revised 6/15/2023	

## **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	XXXXXXXXXXXXXXXX	2.00	XXXXXX
Value of Project Assets		XXXXXX	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	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 <b>A</b>	Value at beginning of project <b>B</b>	Depreciation (10% of purchase cost, per calendar year) <b>C</b>	Value at end of project <b>D</b>
<i>Comb</i>	<i>Purchased previous year</i>	<i>6.00</i>	<i>5.40</i>	<i>.60</i>	<i>4.80</i>
<i>Brush</i>	<i>Purchased current year</i>	<i>4.00</i>	<i>4.00</i>	<i>.40</i>	<i>3.60</i>
<b>Total Depreciation (Depreciation is an expense)</b>	<b>XXXX</b>	<b>XXXX</b>	<b>XXXX</b>		<b>XXXXXX</b>
<b>Value of Project Assets</b>	<b>XXXX</b>	<b>XXXX</b>	<b>XXXX</b>	<b>XXXXXXXXXX</b>	

## PROJECT ANIMAL 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.
<b>Value at Beginning</b>	XXX	XX	XXXXXX	XXX		XXXXXX	XXXXXX
<b>Value at End/ Value of Animal Assets</b>	XXX	XX	XXXXXX	XXX	XXXXXX		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
<b>Total Non-Feed Expenses</b>		XXXXXXXXXXXXXXXXXXXXXXXXXXXX	

## 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
<b>Total Feed Expenses</b>		XXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXX	

### 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, THEN ENTER ZERO**. 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.**

**IF NONE, ENTER ZERO**. 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
		<b>Total Value of Product Sold, if none, enter zero</b>	

### 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 PROFIT OR LOSS** (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. Do Not 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.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## This image shows a full page of blank, lined paper. It features approximately 28 evenly spaced horizontal black lines across its entire width, typical of standard notebook paper. The background is white, and there are no margins, text, or other markings present.

# 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.



# Beef Skillathon

## Beef Breed Identification



Jr, Int., Sr.

Animals are selected for traits or characteristics 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, it is known as *crossbreeding*. The resulting offspring often outperform the parents due to a phenomenon call hybrid vigor. A *composite* breed is a new breed or new line of cattle that are the result of crossbred animals in order to take advantage of the good traits of both breeds and to improve hybrid vigor. They have a set of traits that they consistently pass on and they have an established breed registry.

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

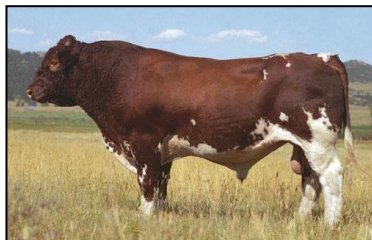
### Word Bank:

Charolais  
Chianina  
Santa Gertrudis

Simmental  
Gelbvieh  
Brangus

Hereford  
Limousin  
Shorthorn

Maine-Anjou  
Brahman  
Angus



\_\_\_\_\_  
From France, this is one of the larger breeds. Mature bulls 2200 - 3100 pounds & mature cows 1500 - 1900 pounds. Very dark red or black with white markings on the head, belly, rear legs, and tail with white on other parts of the body common. Dual-purpose breed for milk and meat.



\_\_\_\_\_  
This breed was developed to utilize the superior traits carcass traits of Angus (5/8) with the superior production traits of Brahman cattle (3/8). They are known for their resistance to heat and humidity, as well as high fertility and milking ability. These cattle are polled.



\_\_\_\_\_  
The King Ranch in Texas crossed Shorthorn cows with Brahman/ Shorthorn bulls to produce a 5/8 Shorthorn and 3/8 Brahman USDA recognized breed. These cattle are known for their growth rate, long life, and hardiness in harsh conditions.



\_\_\_\_\_  
Developed in England, this breed has red bodies with white faces, and are known for their foraging ability, vigor, hardiness, and quiet disposition. These cattle can have horns or be polled.



Jr, Int., Sr.



\_\_\_\_\_:

Developed in Italy, these cattle are white with black skin pigmentation. They are very large: mature bull weighs up to 4,000 pounds and stands 6 feet tall. Originally used as draft animals but now used primarily in terminal crossbreeding programs in the U.S. All are horned.



\_\_\_\_\_:

This breed was developed in France and imported into the United States from Mexico. These large, white cattle are noted for their fast growth rate and lean meat, making them popular in crossbreeding programs.



\_\_\_\_\_:

This breed was developed in England as a dual purpose breed (milk and beef). These animals can be red, white or roan in color. They are noted for their good disposition and mothering and milking abilities.



\_\_\_\_\_:

One of the oldest cattle breeds in the world, imported into the United States from Switzerland, France and Germany. Can be red and white, gold and white with white faces and pigment around the eyes, or black. They are noted for their fast growth and milking abilities.



\_\_\_\_\_:

These animals vary from light gray or red to almost black. Longevity, ability to withstand heat and insects are the breed's most important economic traits.



\_\_\_\_\_:

Originating in Germany, selected for meat, milk and work. Introduced into the US through the importation of semen. Red or black in color with strong skin pigmentation. Known for superior fertility, calving ease, mothering ability and growth rate of calves.

To learn more about breeds of beef cattle, visit: <http://www.ansi.okstate.edu/breeds/cattle> .



Jr, Int., Sr.



\_\_\_\_\_:  
Originating in Scotland, this is the largest beef breed registry. Cattle are polled with a black, smooth coat. They are known for their carcass quality, milking, mothering and reproductive ability.



\_\_\_\_\_:  
Developed in the west-central part of France, they were first imported to Canada. Solid to golden-red in color with lighter circles around the eyes and muzzle. They have excellent carcass traits and feed efficiency.

## Selection: Visual Evaluation

How well an animal can stand and move around will have a major impact on its ability to find food, mate, and care for its young. Often, an animal that stands correctly will move freely while a crooked legged animal may have trouble getting around and may become sore or lame. Feet and leg structure as well as movement are important evaluation criteria for breeding animals.

**Directions:** Visually evaluate the eight drawings below. Use the word bank to label the cattle feet and leg structure. Some words may be used more than once.

### Word Bank:

Correct  
Sickle-Hocked

Bow-legged  
Post-legged

Knock-kneed

1.	2.	3.	4.	5.	1. _____
					2. _____
					3. _____
					4. _____
					5. _____
					6. _____
6.	7.	8.	9.		7. _____
					8. _____
					9. _____



# Beef Skillathon

## Reproduction Overview

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

**Word Bank:** Ovulation, calving, gestation, fertilization, copulation, dystocia.

Sexual reproduction begins with mating, called \_\_\_\_\_, when the bull deposits **semen** (seminal fluid + sperm) into the reproductive tract of the cow or heifer. This occurs during the time period called **estrus** or heat, when the female will accept the male for breeding. \_\_\_\_\_ is the release of the **egg** cell from the **follicle** on the **ovary**. \_\_\_\_\_ is the union of the sperm and the egg cell. Cows typically give birth to only one calf at a time but release of more than one egg is possible and twins are not out of the question. \_\_\_\_\_ is the period of time during which the animal is pregnant and **parturition** is the process of giving birth, also called \_\_\_\_\_. \_\_\_\_\_ is a difficult birth and cows or heifers experiencing dystocia may have trouble re-breeding.

### Gender Names and Terminology

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

- |                              |           |
|------------------------------|-----------|
| 1. Baby: _____               | A. Heifer |
| 2. Young female: _____       | B. Bull   |
| 3. Mature female: _____      | C. Cow    |
| 4. Intact Male: _____        | D. Steer  |
| 5. Castrated male: _____     | E. Calf   |
| 6. Tattoo Pliers: _____      |           |
| 7. Ultrasound Machine: _____ |           |
| 8. CIDR: _____               |           |
| 9. Burdizzo: _____           |           |
| 10. Thermos: _____           |           |
| 11. Semen Tank: _____        |           |





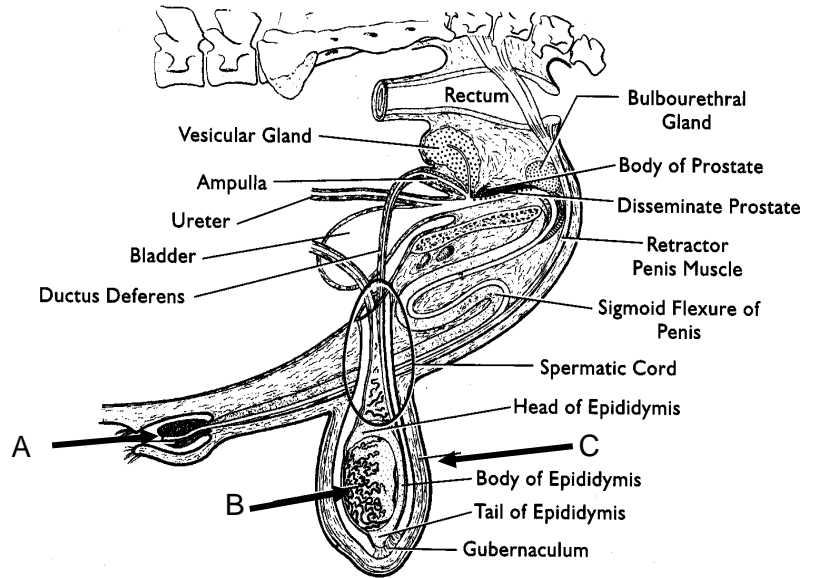


# Reproductive Anatomy

Most cows will give birth to a single calf each year. The way an animal reproduces determines the type of reproductive tract it has. Understanding reproductive anatomy is basic to managing reproduction.

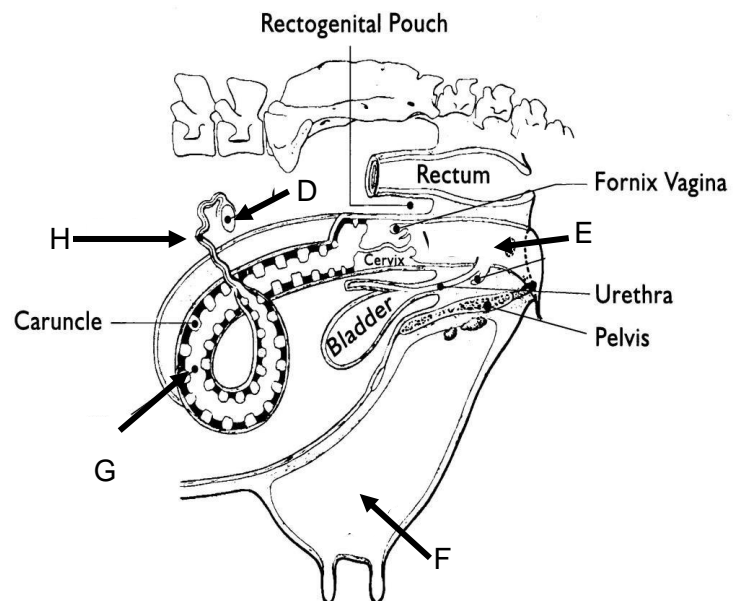
**Directions:** Questions 1-8, match the reproductive anatomy to the correct term. Questions 9-12, write in the correct anatomical term.

## Male Anatomy



1. Mammary Glands: \_\_\_\_\_
2. Ovary: \_\_\_\_\_
3. Uterine Horn: \_\_\_\_\_
4. Oviduct: \_\_\_\_\_
5. Scrotum: \_\_\_\_\_
6. Testis: \_\_\_\_\_
7. Vagina: \_\_\_\_\_
8. Glans Penis: \_\_\_\_\_

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.



## Female Anatomy

**Timing of Reproductive Events**

**Directions:** Review the table below, for questions 1 & 2 write either *Bos Taurus* or *Bos Indicus* in the blank boxes in the “Breed/Type” column.

	<b>Puberty*</b>		<b>Breeding Information*</b>		
Breed/Type	Weight (lbs)	Age (mos)	Estrus (hrs)	Estrous Cycle (days)	Gestation Length (days)
1.	575	10-15	12-18	21	279-284
2.	675	17-27	4 - 8	21	293

**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. They are accompanied by an accuracy value between 0 and 1 which represents the reliability of the prediction. 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. For instance, a low birthweight EPD would be highly desirable for a bull that is to be bred to first calf heifers.

**Directions:** Use the EPD table below. Write the letter A, B, C, or D for the bull you select to

Bull	Birth Weight (BW)	Calving Ease (CE)	Weaning Weight (WW)	Milk (MILK)	Scrotal Circumference (CE)	Rib Eye Area (REA)	Marbling (MARB)
A	0.0	+0.8	+12	+22	+0.9	-1.2	-0.02
B	+1.6	-1.4	+4	+18	-0.4	-0.3	+0.05
C	-0.2	+2.6	+20	+14	+0.8	+0.5	+0.08
D	+0.5	-0.5	+35	+22	+1.3	+1.1	+0.12

answer each question.

- Which bull's male offspring will have the largest scrotal size? \_\_\_\_\_
- Which bull's calves will produce carcasses with the highest USDA quality grade? \_\_\_\_\_
- Which bull's heifer calves will likely have the most trouble calving? \_\_\_\_\_
- Which bull's calves will be the lightest at weaning weight? \_\_\_\_\_
- Which bull's offspring will have the most prenatal growth? \_\_\_\_\_
- Which bull's offspring will have the most prenatal growth? \_\_\_\_\_
- Which bull's calves will produce the largest rib eyes? \_\_\_\_\_

## 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

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