

# BEEF PROJECT RECORD BOOK

2024

Name:		
4-H Club/FFA Chapter/Open:		
Leader:		
Age (as of January 1):		
Years in Project Area:		
Record Started:	Record Closed:_	Month Day Year
	Check One	
Junior:	Intermediate:	Senior:
8-11 years old	12-14 years old	15-19 years old

# **Record Book Instructions:**

#### DON'T CHANGE THE PAPER:

Completed record books must be on standard letter sized (8.5"x11") white paper. There are classes in still exhibits for scrapbook so please leave these types of books there. Minor embellishments are allowed, and neatness is encouraged. Books must be fastened with a staple in the upper right-hand corner or secured inside a 3-ring binder or folder.

#### DON'T BE LATE.... KNOW THE DUE DATE AND TIME:

The date and time to turn in a completed record book will be listed on the Schedule of Events of Exhibitors.

### **USE THE RIGHT RESOURCES:**

A good resource to help complete this record book includes the publication "Your 4-H Market Beef Project" which is available by loan at the Gratiot County MSU Extension Office. Other resources can be found online.

#### ONLY COMPLETE YOUR AGE DIVISON:

There are no extra credit points for younger age divisions completing the whole record book.

### **BREEDING STOCK:**

Please fill out the record book to the best of your knowledge for your breeding animal. It is still required for you to fill out the All about my beef project, project expenses, and business plan pages.

## All about my beef project...

For this section use the animal you will most likely exhibit at the fair. If you are exhibiting both market and breeding stock, focus on one registered animal.

Name or identification of m	ny animal:				
GCFFY Tag Number:	R	FID Number:	Breed:		
Color(s):		Date of birth:		_ Actual BD	_ Estimated
Special Markings:					
Please check one: Pu	ırchased	Raised	Date of purchase:		
Please check one: Ste	eer H	leifer Co	w (breeding stock only	y)	
Purchase price:	If you raised	d your animal, list t	he estimated market v	alue.	

A completed record book should have photos of your animal. At a minimum this book should have a beginning and ending picture. Photo captions are encouraged and up to two extra pages can be included in this record book.

## All about my beef project...

You may choose to do the weight record OR the essay. The points scored for whichever choice you make will be the same. The fair recommends all market exhibitors weigh their animals frequently but understands that access to a scale is not always available.

**Essay:** DO NOT COMPLETE THE WEIGHT RECORD: Write and attach to your completed book an essay from one of these two essay topic choices. Junior exhibitors complete an up to half page essay. Intermediate Exhibitors complete an up to one page essay. Senior Exhibitors complete an up to 2 page essay. **Topic 1:**Describe what judges look for in the show ring of the fair. Discuss steps you can take to present your animal in the best possible way to a judge. **Topic 2:** With animal rights groups such as PETA looking to showcase animal abuse, what steps can you take to ensure your animal is raised comfortably. Essays have the same possible points as the above weight section.

#### Weight Record:

It is recommended to weigh your market animals at least once a month. Use one chart for up to four animals. These should be the same four market animals registered on the market beef registration on fair entry.

Animal ID Date	Method (scale	Weight	Weight	Weight	Weight
Dato	or tape)	VVoignt	VVolgiit	Worgine	Worght
	. ,				
Final					
Describe cha	anges made based on i	nformation you	gathered collecting	this weight data.	

**My project expenses:** List all expenses for this project and record the cost spent under the proper account. If your family/farm is providing feed, please estimate an approximate value. Add additional sheets if necessary. A completed table will have more than one line for each cost. For example feed costs will be for more than just feed need to be itemized grain, hay, mineral etc. (5 pts.)

Date of purchase	Purchase description	Feed Cost	Vet/health Cost	Bedding Cost	Other cost
     Γotal Column Ex	nenses				
	enses: (total column expenses)				
	animals (total project expenses divi				

# My Business Plan:

The following calculations will help you learn about your ability to earn a profit for your participation in this agricultural project. Often in animal projects the profit margin for commercial feeding facilities has a slim profit margin. Let's see how your project would compare.

Nould you have been able to make a profit if you would have sold your beef animal at the stock yard at this current market price rather than the fair's livestock sale? Why or why not?
What is the current market price of market beef?
To calculate the break-even price divide the average cost per animal by finished weight.
Break-even price:
Note: finished weight can be taken at home anytime during the week prior to fair or it can be the fair's official market weight.
Finished weight of project animal:
Average cost per animal:
Number of project animals in this report:
Total Expenses (whole project):
Purchase cost (primary project animal):
Average cost per animal:

# Keeping my beef project healthy:

Listed below are common health problems in cattle. List the cause of these health problems (virus, bacteria, deficiency, etc.); how an animal can contract the disease and provide the symptoms and the treatment for the disease (if no treatment state the next steps for the animal).

Bluetongue: (2 pts.)	
Blackleg: (2 pts.)	_
Coccidiosis: (2 pts.)	_
Pneumonia: (2 pts.)	_
	_
List steps you can take to keep cattle healthy: (2 pts.)	

# Animal Care and Management

## Junior, Intermediate, Senior Division Complete the following (10 points):

			your beef animal (1 pt):	
What do you	u feed your anim	nal? (Check all th	at apply) (1pt)	
			Supplements	
Please attac	ch your feed tag	here to answe	er questions below (1 pt.)	
What is the	Brand Name an	d Product Nar	me of this feed? (2 pt.)	
Who is resp	onsible for manu	ufacturing this	feed? (1 pt.)	
			nis feed? (1 pt.)	
			feed? (1 pt.)	
			If not clear, probably the first ingredient liste	
Is this a med	dicated feed? (1	pt.)		

Your project takes regular care and management. List the things necessary to take care of your project animal(s). (10 points)
Feeding and watering practices, grooming (clipping, trimming, foot care, etc.), health practices and medicines, general management (cleaning living area and feed pans, halter breaking, training etc.)
Daily Responsibilities
Weekly Responsibilities
Monthly Responsibilities
Yearly Responsibilities -

### Junior, Intermediate, Senior Division Complete the following:

### Read the Medication Label and Answer the Following Questions:



#### **Prevail**™ (flunixin meglumine injection) 50 mg/mL

Only for Intravenous Use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Yeal Calves. For Intravenous and Intramuscular use in Horses. CAUTION

Federal law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION

Each milliliter of Prevail™ (flunixin meglumine injection) contains flunixin meglumine equivalent to 50 mg flunixin, 0.1 mg edetate disodium, 2.5 mg sodium formaldehyde sulfoxylate, 4.0 mg diethanolamine, 207.2 mg propylene glycol, 5.0 mg

phenol as preservative, hydrochloric acid, water for injection q.s. PHARMACOLOGY

Flunkin meglumine is a potent, non-narcotic, non-steroidal, analgesic agent with anti-inflamma-tory and anti-pyretic activity. It is significantly more potent than pentazocine, meperidine and codeine as an analgesic in the rat yeast paw test.

as an analgesic in the rat yeast paw fest.

Morace Flunkin is four times as potent on a
mg-per-mg basis as phenylbutazone as measured
by the reduction in lameness and swelling in the
horse. Plasma half-life in horse serum is 1.6 hours
tollowing a single dose of 1.1 mg/kg. Measurable
amounts are detectable in horse plasma at 8 hours
post injection.

Cattle: Flunixin meglumine is a weak acid (pKa=5.82)¹ which exhibits a high degree of plasma

protein binding (approximately 99%), \*However, free (unbound) drug appears to readily partition into body issues (V.), predictions range from 297 to 732 mL/kg; \*2 fotal body water is approximately equal to 570 mL/kg; in cattle, elimination occurs primarily through biliary excetion.\* This may, at least in part explain the presence of multiple peals in the blood concentration time. The profile following IV administration.\*

administration.\* In healthy cattle, total body clearance has been reported to range from 90 to 151 mL/kg/m²-² These studies also report a large discrepancy between the volume of distribution at a steady state (V<sub>s</sub>) and the volume of distribution associated with the terminal elimination phase (V<sub>b</sub>). This discrepancy appears to be attibutable to extended only alimination from a deep compartment.\* The terminal half-life has been shown to vary from 3.44 to 8.12 hours.²²

Flurixin persists in inflammatory tissues? and is associated with anti-inflammatory properties which extend well beyond the period associated with detectable plasma drug concentrations. \*\*S These observations account for the counter-clockyrise observations account for the counter-clockyrise prediction of drug concentrations have upon reflection of drug concentrations based upon the estimated plasma terminal elimination half-life will likely underestimate both the duration of drug action and the concentration of drug remaining at the site of activity. INDICATIONS

Horse: Prevail™ (flunixin meglumine injection) is recommended for the alleviation of inflammation and pain associated with musculoskeletal disorders in the horse. Its also recommended for the alleviation of visceral pain associated with colic in the horse.

PRECAUTIONS
As a class, cyclo-oxygenase inhibitory NSAIDs may be associated with gastrointestinal and reral toxicity. Sensitivity to drug-associated adverse effects varies with the individual patient. Patients at greatest risk for renal toxicity are those that edehydrated, on concomitant diurelic therapy, or those with renal, cardiovascular, and/or hepatic dysfunction.

dystunction. Since many NSAIDs possess the potential consistent of the potential consistency of the potenti

Horse: The effect of Prevail™ on pregnancy has not been determined. Studies to determine activity of Prevail™ when administered concomitantly with

9

other drugs have not been conducted. Drug compatibility should be monitored closely in patients requiring adjunctive therapy.

Set the conductive the conductive therapy as artise to not use in bulls intended for breading, as reproductive offices of Prevail<sup>100</sup> (furnism meglumine injection) in these classes known to have potential effects on both partunition (Secontraindications) and the estrous cycle. There may be a delay in the onset of estruss if flurioran is administered during the prostaglandin phase of the estrous cycle. NSAIDs are known to have the estrous cycle. NSAIDs are known to have the effect. The use of MSAIDs in the immediate post-partum period may interfere with uterine involution and expulsion of fetal membranes. Cows should be monitored carefully for placental retention and metritis if Prevail<sup>111</sup> is used within 24 hours after parturition.

SAFETY
Morse A 3-fold intramuscular dose of 1.5 mg/lb of body weight daily for 1.0 consecutive days was safe. No changes were observed in hematology, serum chemistry, or unnalysis values. Intravenous dosages of 0.5 mg/lb daily for 15 days; 1.5 mg/lb daily for 10 days; and 2.5 mg/lb daily for 5 days produced no changes in blood or urine parameters. No injection site irritation was observed following intramuscular injection of the 0.5 mg/lb recommended dese. Some administered intramuscularity.

Cattler No Illurian related changes (adverse reactions) were noted in cattle administered a 1X (2.2 mg/kg. 1.0 mg/lb) dose for 9 days (three times the maximum clinical duration). Minimal toxicity manifested itself at moderately elevated doses (3X and 5X) when flurixin values administered daily for 9

days, with occasional findings of blood in the feces and/or urine. Discontinue use if hematuria or fecal blood are observed.

blood are observed.

ADVERSE REACTIONS
In horses, isolated reports of local reactions following intramuscular injection, particularly in the neck, have been received. These include localized swelling, sweating, induration, and stiffness in instances in horses, fatal or nonfatal clostridial infections or other intens have been experted infections or other intens have been experted (furnish meglumine injection). In horses and cattle, rare instances of anaphylactic-like reactions, some of which have been fatal have been reported, primarily following intravenous use.

Cattle: Prevail™ (flunixin meglumine injection) is indicated for the control of pyrexia associated with bovine respiratory disease, endotoxemia and acute bovine mastitis. Prevail™ is also indicated for the control of inflammation in endotoxemia.

DOSE AND ADMINISTRATION

Harase: The recommended dose for musculoskeletal disorders is 0.5 mg per pound († mL/100 lbs) of 
body weight once day. Treatment may be given by 
for up to 5 days. Studies show onset of activity is 
within 2 hours. Peak response occurs between 12 
and 16 hours and duration of activity is 24-36 hours. 
The recommended dose for the alleviation of pain 
associated with equine oclic is 0.5 mg per pound of 
body weight. Intravenous administration is 
recommended for prompt relief. Clinical studies 
show pain is alleviated in less than 15 minutes in 
5.

many cases. Treatment may be repeated when signs of colic recur. During clinical studies approximately 10% of the horses required one or two additional treatments. The cause of colic should be determined and treated with concemitant therapy.

\*\*Gattbe:\* The recommended dose for control of pyrexia associated with borine respiratory disease and endotoxemia and control of inflammation in endotoxemia is 1,1 to 2.2 mg/kg (5-15 ml/gg/b). 1 to 2 mL per 100 lbs) of body weight given by slow intravenous administration either once a day say and the process of the contravenous administration either once a day say and the contravenous administration either once a day say. 2 mL per 100 libs) of body weight given by slow intravenous administration either once a day as a single dose or divided into two doses administered at 12-hour intervals for up to 3 days. The total daily dose should not exceed 22 mg/kg (10 mg/b) of body weight. Avaid rapid intravenous administration of the drug.

The recommended dose for acute bovine mastitis is 2.2 mg/kg (1.0 mg/lb; 2 mL per 100 lbs) of body

weight given once by intravenous administration. CONTRAINDICATIONS

11

CONTRAINDICATIONS

Morse: There are no known contraindications to this drug when used as directed intra-arterial injection should be avoided thoses inadvertently injected intra-arterially can show adverse reactions. The properties of the properti

meglumine. Cattle: NSADS inhibit production of prostaglandins which are important in signaling the initiation of parturition. The use of flumion can delay parturition and prolong labor which may increase the risk of stillbirth. Do not use Prevail™ (flumion meglumine injection) within 48 hours of expected parturition.

Do not use in animals showing hypersensitivity to flunion meglumine. Use judiciously when renal impairment or gastic teleration are suspected.

RESIDIE WARNINGS:

Cattle must not be slaughtered for human consumption within 4 days of the last treatment. Milk that has been taken during teatment and for 36 hours after the last treatment and for 36 hours after the last use in dry dairy cows. A withdrawal period has not been established for this product in preruminating calves. Do not use in horses intended for food. Approved only for intravenous administration in cattle, intramuscular administration has resulted in violative residues in the edible bissues of cattle sent to slaughter.

pharmacodynamics of flunixin in calves by use of pharmacokinetic/pharmacodynamic modeling. Am J Vet Res. 1995;56:786-794. Only for Intravenous use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular Use in Horses. Read accompanying directions for use.

To report suspected adverse drug events, for technical assistance or to obtain a copy of the Safety Data Sheet (SDS), contact Huvepharma, Inc. at 1-877-994-4883 or www.huvepharma us. For additional information about adverse us. The strength of the streng

How Supplied
Prevail™ (flunixin meglumine injection), 50
mg/mL, is available in 100 mL and 250 mL
multi-dose vials.

Store at Controlled Room Temperature,  $20^{\rm o}$  to  $25^{\rm o}$  C (68° to 77° F) [See USP].

When used as labeled, there is no limit on the number of punctures throughout the full expiry period.

REFERENCES

1. Johansson M. Anler El. Gas chromatographic analysis of fluminin in equine urine after extractive methylation. *J. Chromatogr.* 1988;427:55-66

2. Oldenswik K. Johansson M. High-performance liquid chromatography method for determination ices after single and repeated doses of the drug. *Am. Met Res.* 1995;65:488-495.

3. Anderson Kl., Neff-Davis CA, Davis LE, Bass VD, Pharmacokinetics of fluminin in flactuing cattle after single and multiplimine in factuing cattle after single and multiplimine. *Am. Julet Res.* 1990;51:1464-1467.

4. Oldenswik K. Pharmacokinetics of fluminin and its effect on prostaglandin Fize metabolitic concentrations after oral and intravenous administration in heletis. *J Vet Pharmacol Ther.* 1995;16:254-259.

Hardee GE, Smith JA, Harris SJ, Pharmacokinetics of fluriixin meglumine in the cow. Res Vot Sci. 1985;39:1-V. Pharneuf LP, Dunlop R, Physiology of Small and Large Animas Chapter 2: "Body Fluid Compartments," Philadelphia, Par B C, Decker; 1991;3-18.

 Kopcha M, Ahi AS, Experimental use of fluriixin meglumine and pherylbutazone in food-producing animals. J Am Vet Med Assoc. 1993;1946—49.

 January C, Maria C, Mar

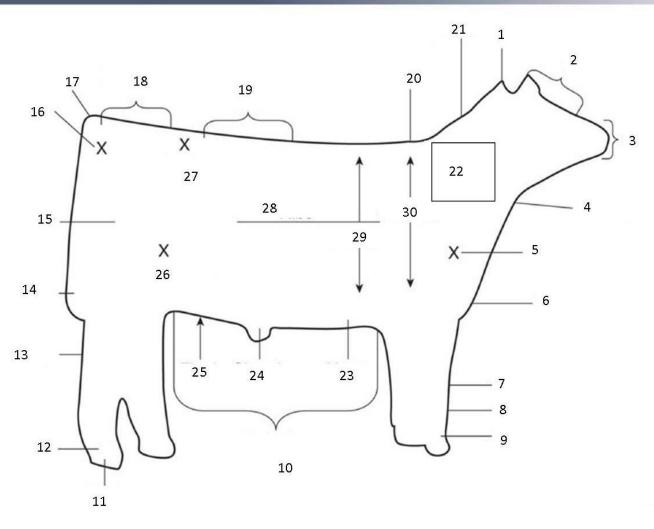


## Medication Label Questions (10 points.):

1. What is the name of this medication?
2. How big of a bottle is this medication?
3. How should this medication be administered?
4. What is the recommended dosage for cattle?
5. What dosage would you give a 900 lb steer?
6. How often and how many days should this medication be administered according to the medication labels recommendation?
7. Looking at the temperature at which this medication should be stored. Where would be a good location to store it?
8. What is the withdrawal time for this medication for cattle?
9. (2pts) If the slaughter date for an animal is 8-15-24 and you administer this drug on 8-10-24. Are you following the correct withdrawal period? Why or Why not?
The following is the drug policy from the fairbook. Fill in the blanks (5 points):
Drug testing may be performed on market animals at any time while on fairgrounds. Any animal found to be in violation, will be Any animal containing substances at any level not in compliance with and/or
safety standards; illegal substances and or tampered with animals will be Any monies and awards awarded to the individuals, including proceeds will be

# My General Beef Knowledge:

# Anatomy of Beef Cattle



Intermediate & Senior Division Complete (30 points):

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

# My General Beef Knowledge cont.

## Senior Division Complete (20 points):

1. Name Four (4) Beef Cattle breeds and include 1 trait of each. (8 pt.)
2. What are five (5) common retail cuts of beef? (5 pt.)
3. What is a beef byproduct? Give an example of a byproduct and where it comes from ? (3 pt.)
4. Name the four (4) compartments of the stomach (4 pt.)