LIVESTOCK AND FORAGE RECORD BOOK

Year _____

Name _____

Herd/Location _____

_____

Farm Premise ID _____

BQA Number _____

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

University of Arkansas,U.S. Department of Agriculture,
and County Governments Cooperating

Emergency Contacts

This Record Book was developed by Johnny Gunsaulis, CEA - Staff Chair, Benton County. It was made possible by funding from USDA-CSREES grant funds, Project 406.

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SUGGESTED MANAGEMENT TIPS

1. Breed replacement heifers so they calve at two years of age.
2. Feed heifers to weigh at least 65% of mature weight at breeding.
3. Feed heifers to weigh 85% of mature weight at first calving.
4. Breed replacement heifers a month ahead of the cow herd and wean calves from heifers a month ahead.
5. Feed cows and heifers so they are in a positive energy balance at time of breeding.
6. Semen evaluate herd bulls each year.
7. Use good vaccination programs to help ensure optimum herd health.
8. Maintain internal and external parasite control procedures.
9. Read and follow directions on animal health products.
10. Give injections ahead of the shoulder.
11. Utilize an effective identificaton system and keep complete records.

Forage Crop Planting Guide

Forage Crop	Time to Plant	Seeding Rate, lb/Ac	Seeding Depth
Alfalfa	fall	15-20	1/4-1/2"
Bermudagrass	April-June	5-10 (seed) 20 bu. (sprig)	0-1/2"
Ky. bluegrass	fall	10-15	0-1/4"
Crimson clover	fall	20-30	1/4-1/2"
Red clover	fall	12-15	1/4-1/2"
White clover	fall, spring	2-3	0-1/4"
Fescue	fall, spring	20-25	1/4-1/2"
Orchardgrass	fall	15-20	1/4-1/2"
Ryegrass	fall	20-30	0-1/2"
Oats, wheat, rye	fall	90-120	1-2"
Sorghum-sudan	May-June	30-35	1-2"
Pearl millet	April-June	25-30	1/2-1 1/2"
Indian grass	spring	6-10	1/4-1/2"
Vetch, common	fall	30-40	1-2"
Vetch, hairy	fall	20-25	1-2"

Body Temperatures of Farm Animals

Average Normal Rectal Temperature: Range ± 1°F	
Horse	100.5
Cow	101.5
Sheep	103.0
Goat	104.0
Pig	102.0
Dog	102.0
Cat	101.5

Daily Water Requirements of Mature Farm Livestock*

Horses	10-12 gallons
Dairy cows, dry	8-12 gallons
Dairy cows, lactating	20 to 40 gallons
Beef cattle	8 to 12 gallons
Sheep	1-2 gallons
Swine	1-2 gallons

*The best practice is to have an unlimited amount of water available at all times.

Gestation Table

Average Gestation Period

	Weeks or	Days	Extremes (days)
Sow	16	112	100 to 120
Ewe	22	150	146 to 157
Cow	40 1/2	280	240 to 311
Mare	48 1/2	340	307 to 412

Date of	Date Animal Due to Give Birth			
Service	Mare	Cow	Ewe	Sow
Jan. 1	Dec. 7	Oct. 11	May 31	Apr. 25
Jan. 11	Dec. 17	Oct. 21	June 10	May 5
Jan. 21	Dec. 27	Oct. 31	June 20	May 15
Jan. 31	Jan. 6	Nov. 10	June 30	May 25
Feb. 10	Jan. 16	Nov. 20	July 10	June 4
Feb. 20	Jan. 26	Nov. 30	July 20	June 14
Mar. 2	Feb. 5	Dec. 10	July 30	June 24
Mar. 12	Feb. 15	Dec. 20	Aug. 9	July 4
Mar. 22	Feb. 25	Dec. 30	Aug. 19	July 14
Apr. 1	Mar. 7	Jan. 9	Aug. 29	July 24
Apr. 11	Mar. 17	Jan. 19	Sept. 8	Aug. 3
Apr. 21	Mar. 27	Jan. 29	Sept. 18	Aug. 13
May 1	Apr. 6	Feb. 8	Sept. 28	Aug. 23
May 11	Apr. 16	Feb. 18	Oct. 8	Sept. 2
May 21	Apr. 26	Feb. 28	Oct. 18	Sept. 12
May 31	May 6	Mar. 10	Oct. 28	Sept. 22
June 10	May 16	Mar. 20	Nov. 7	Oct. 2
June 20	May 26	Mar. 30	Nov. 17	Oct. 12
June 30	June 5	Apr. 9	Nov. 27	Oct. 22
July 10	June 15	Apr. 19	Dec. 7	Nov. 1
July 20	June 25	Apr. 29	Dec. 17	Nov. 11
July 30	July 5	May 9	Dec. 27	Nov. 21
Aug. 9	July 15	May 19	Jan. 6	Dec. 1
Aug. 19	July 25	May 29	Jan. 16	Dec. 11
Aug. 29	Aug. 4	June 8	Jan. 26	Dec. 21
Sept. 8	Aug. 14	June 18	Feb. 5	Dec. 31
Sept. 18	Aug. 24	June 28	Feb. 15	Jan. 10
Sept. 28	Sept. 3	July 8	Feb. 25	Jan. 20
Oct. 8	Sept. 13	July 18	Mar. 7	Jan. 30
Oct. 18	Sept. 23	July 28	Mar. 17	Feb. 9
Oct. 28	Oct. 3	Aug. 7	Mar. 27	Feb. 19
Nov. 7	Oct. 13	Aug. 17	Apr. 6	Mar. 1
Nov. 17	Oct. 23	Aug. 27	Apr. 16	Mar. 11
Nov. 27	Nov. 2	Sept. 6	Apr. 26	Mar. 21
Dec. 7	Nov. 12	Sept. 16	May 6	Mar. 31
Dec. 17	Nov. 22	Sept. 26	May 16	Apr. 10
Dec. 27	Dec. 2	Oct. 6	May 26	Apr. 20

Cow/Calf Record

Cow No.	Cow Wt.	Date Bred	Sire No.	Calf No.	Calf Sex	Calf Birth Date	Birth Wt.	Wean Wt.	Remarks

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Hay Harvest Record

FIELD	HARVEST DATE	NO. BALES	CONDITIONS

Hay Harvest Record

FIELD	HARVEST DATE	NO. BALES	CONDITIONS

Pesticide Record

Date/Field ID		**Date/Field ID**	
Product		**Product**	
Crop & Acres		**Crop & Acres**	
Rate		**Rate**	
Wind Speed		**Wind Speed**	
Wind Direction		**Wind Direction**	
Temperature		**Temperature**	
Date/Field ID		**Date/Field ID**	
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Temperature		**Temperature**	

Boom Sprayer Calibration

1. Determine nozzle spacing.
2. Refer to the following chart to determine calibration course†:

Nozzle spacing	Length of calibration course†
15″	272′
18″	227′
20″	204′
22″	186′
24″	170′

† To determine calibration course for a nozzle spacing not listed, divide 340 by the spacing expressed in feet. Example: Calibration disance for 19-inch nozzle spacing = 340 divided by 19/12 = 215 feet.

3. Measure and stake off the appropriate calibration course based on nozzle spacing. The course should be on the same type of ground that will be sprayed. (Speeds may be faster on roads than on sod, changing the application rate.)
4. Drive the course in the gear and rpm you will use when actually spraying. Record the time in seconds. Do this twice and average the time.
5. Park the tractor and maintain the same rpm. Turn on the sprayer and catch the water from one nozzle for exactly the same number of seconds that it took to drive the calibration course.
6. Ounces caught = gallons per acre.
7. Check all nozzles. Flow rate should not vary more than 10% among all nozzles. Clean or replace any nozzles that do not fall into this range.

ALWAYS READ AND FOLLOW
LABEL DIRECTIONS.

Boomless Sprayer Calibration

1. Measure effective swath width.
2. Refer to the following chart to determine calibration course†:

Swath Width	Length of calibration course†
35′	157′
40′	136′
45′	121′
50′	109′

† To determine the length of calibration course for a swath width not listed, divide 5,460 square feet (1/8 acre) by the swath width in feet.
Example: Calibration distance for 32-foot swath width = 5460 divided by 32 = 171′.

3. Drive the course in the gear and rpm you will use when actually spraying. Record the time in seconds. Do this twice and average the time.
4. Park the tractor and maintain the same rpm.
5. Turn on the sprayer and use a trash bag and bucket to catch the water for exactly the same number of seconds required to drive the calibration course.
6. Pints caught = gallons per acre.

ALWAYS READ AND FOLLOW
LABEL DIRECTIONS.

Fertilizer Applications

Date	Field No.	Crop	Acres	Type	Amount

Fertilizer Applications

Date	Field No.	Crop	Acres	Type	Amount

Common Weights and Measures

Length			
1 Inch	1/12 or .083 ft	2.54 cm	25.4 mm
1 Foot	12 in	.3048 m	30.48 cm
1 Yard	36 in	3 ft	.9144m
1 Rod	16.5 ft	5.5 yd	5.03m
1 Mile	1760 yd 8 furlongs	5280 ft	1.61 km
Area			
1 Square Inch	.007 square ft	6.45 square cm	
1 Square Foot	144 square in	929.03 square cm	
1 Square Yard	9 square ft	.836 square m	
1 Acre	4840 square yd 6361 square m	43,560 square ft .405 hectare	160 sq. rods
1 Hectare	10,000 square m	2.47 acres	
1 Square Mile	640 acres	2.59 sq km	1 section
Volumes			
1 Cubic Inch	.00058 cubic ft		16.4 cubic cm
1 Cubic Foot	1,728 cubic in	.037 cubic yd	.028 cubic m
1 Cubic Yard	27 cubic ft		.765 cubic m
Liquid Measures			
1 Teaspoon	.1667 fl oz	80 drops	4.93 milliliters
1 Tablespoon	3 teaspoons	.5 fl oz	14.8 milliliters
1 Fluid Ounce	2 tablespoons		29.58 millilliters
1 Cup	8 fl oz	16 tablespoons	236.6 milliliters
1 Pint	2 cups	16 fl oz	473.2 milliliters
1 Quart	2 pints	32 fl oz	.946 liters
1 Liter	2.113 pints	1,000 milliliters	1.057 quarts
1 Gallon	4 quarts	128 fl oz	3.785 liters
1 Cubic Ft of Water	7.5 gal	62.4 lb	28.3 liters
1 Acre In of Water	27,154 gal	3,630 cubic ft	

Common Weights and Measures

Dry Measures			
1 Teaspoon (level)	.35 cubic in	5.74 cubic cm	
1 Tablespoon (level)	1.05 cubic in	3 level tsp	17.21 cubic cm
1 Cup	16 level Tbs	16.8 cubic in	275.3 cubic cm
1 Quart	2 pints 1.101 liters	64 Tbs	67.2 cubic in
1 Peck	8 quarts 8.8 liters	16 pints	538 cubic in
1 Bushel	4 pecks 35 liters	2150 cubic in	32 quarts
Weights			
1 Gram	15.43 grains	1000 milligrams	
1 Ounce	28.35 grams	437.5 grains	
1 Pound	16 ozs	454 grams	.4526 kilograms
1 Kilogram	1000 grams	2.205 lbs	
1 Hundred Weight	100 lbs	45.45 kilograms	
1 Ton (Short)	2000 lbs	20 hundredweight	
Land Grading/Irrigation			
.1 Cut (100 x 100)	37yd3		
1 cfs	449 gpm	1 acre in/hour	
1 Acre Inch	27,154 gal		
1000 gpm will put 1" on 40 acres in 18 hours			
Temperatures			
Water Boiling Point	212°F	100°C	
Human Body Temp.	98.6°F	37°C	
Water Freezing Point	32°F	0°C	
°F to °C Conversions	(1.8 x C) + 32 = °F	.56 x (°F - 32) = °C	

Abbreviations

Inch – in	**Meter – m**	**Tablespoon – Tbs**
Foot – ft	**Kilometer – km**	**Cubic Feet Per Second – cfs**
Yard – yd	**Milliliter – ml**	**Teaspoon – tsp**
Pounds – lbs	**Acre – ac**	**Gallons – gal**
Liter – L	**Ounce – oz**	**Fahrenheit – F**
Millimeter – mm	**Fluid ounce – fl oz**	**Celcius – C**
Centimeter – cm		

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