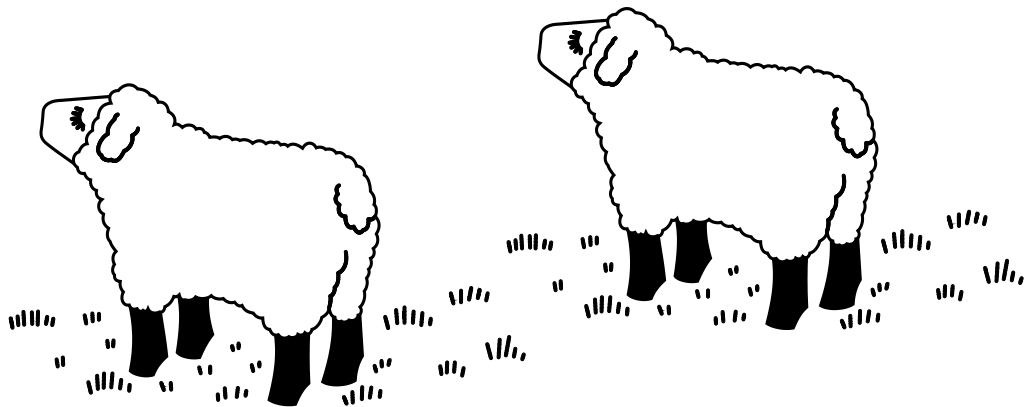


# 4-H

## Bottle Lamb

# Member's Manual



The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

UNL Extension - Holt-Boyd County

# 4-H BOTTLE LAMB PROJECT

## PURPOSES:

To design a livestock project to fit the physical size and maturity level of younger youths, to teach proper health care and nutritional requirements of young livestock, to teach basic sheep management skills without a large investment, to teach basic record-keeping skills and to provide a better understanding of the sheep industry.

## GUIDELINES

1. Bottle Lamb - An orphan or newborn lamb; male or female; fed on bucket or bottle. No nursing permitted. Begin your project by selecting and/or purchasing a lamb born between January 1 and June 1 of current project year within two weeks of birth. Lamb Sources – in the case of twins or triplets, sale barn or neighbor. Develop management and marketing plan with parent, leader or banker.

2. This project is for youths 8-12 years of age. 4-H member must be enrolled in the Bottle Lamb Project. Exhibitor must have completed the annual Livestock Quality Assurance class. 4-H'er should develop management and marketing plan with parent, leader or banker.

3. Your project ends when the lamb is sold as a feeder or market lamb or dies.

4. Identification - Tag lamb with official 4-H ear tag on the ID affidavit by June 15 of current year. Tags available at County Extension Office.

5. Record - 4-H Bottle Lamb Record.

6. Fair Classes - Divisions will be determined by the ages of the exhibitors:

For Holt County -

- Junior Division - 4-H'ers 8-9 years old as of January 1
- Senior Division - 4-H'ers 10, 11-12 years old as of January 1.
- Exhibitors in Bottle Lamb are not eligible for sheep showmanship.

For Boyd County -

- Junior and Senior age divisions will be determined after bottle lambs record books have been turned in for judging.
- Exhibitors in Bottle Lamb are eligible for sheep showmanship.

7. Judging – Bottle Lambs will be led into the ring **after being judged** to receive ribbons and trophies. Because this is a teaching project the quality and condition of the animal is only 15%. The bottle lamb project will be judged according to the following score card:

- Evaluation of a completed record - 35%
- Evaluation of member's knowledge by interview - 35%
- Evaluation and condition of animal - 15%
- Evidence of training and showing - 15%

The interview might include such questions as:

1. Where and when did you obtain your lamb.
2. Was there a cost involved, and how did you finance?
3. How old was the lamb when you received it?
4. How old is it now?
5. What health problems did you have with the lamb?
6. What did you feed the lamb the first day at home?
7. How did you prepare the lamb for moving?
8. What is colostrum, and did you feed any to your lamb?
9. What was your milk feeding program?
10. How long did you milk feed?
11. When did you start giving the lamb solid feed?
12. How often did you change the ration?
13. Did you feed any antibiotics?
14. What is in a milk replacer?
15. Did you warm your milk and how warm?
16. What kind of housing did you have for your lamb?
17. What are some management practices that you conducted - i.e., castrate, vaccinate and trim feet? How did you do these?
18. When did you start training your lamb?
19. Do you plan to make a profit on your lamb?
20. What are our plans for your lamb after the fair?
21. What have you enjoyed most in working with your lamb?

8. Other Project Assistance -

- Project Leader
- Extension Educator
- Veterinarian
- Feed Company Nutritionist
- Veterinary Science Project Manuals
- Sheep Project Manuals

## **CARE OF LAMB**

### **Management of Lambs when Weaned to Milk Replacers**

❖ Colostrum - The need for and benefit of colostrum cannot be over-emphasized! A source of colostrum should be obtained and frozen for use if lamb is obtained within 24 hours of birth. If colostrum is available, it can supply the entire liquid feeding program: Since the antibodies in colostrum are capable of being absorbed from the intestinal tract only during the day after birth, it is essential that the lamb be given 1 ounce of colostrum per pound of lamb weight, during the first 24 hours of life (first 12 hours preferred). Frozen ewe colostrum would be preferred, but frozen cow colostrum also provides adequate antibodies.

- ❖ Place lambs in a warm, dry, enclosed area.
- ❖ Lambs may require assistance the first day in learning to nurse the replacer pail.
- ❖ Avoid placing very young lambs in the same pen with older lambs that may deprive them of adequate milk replacer.
- ❖ Inject lambs with the following when placed in nursery:
  - Iron-dextran
  - Vitamin ADE
  - Combiotic

### **Composition of the Milk Replacer**

There are a number of commercially prepared lamb milk replacers on the market. Lambs will perform satisfactorily on some calf milk replacers that are on the market. However, most calf milk replacers do not contain enough fat to be used successfully with lambs. Listed below are some recommendations for preparing milk replacers:

- ❖ Best results have been obtained with milk replacers containing a minimum of 30 percent fat and 25 percent milk protein.
- ❖ Fat can be added to milk replacers in the form of choice white grease (lard) or butterfat. Vegetable oils should not be used.
- ❖ The replacer should be diluted with water to a minimum of 20 percent dry matter. (Two pounds milk replacer per gallon of water).
- ❖ Mix replacers thoroughly before feeding. Avoid using replacers that will not stay in suspension. Mix the powder in warm water and cool immediately to about 33 degrees F. This helps to eliminate the problem of ingredient separation during storage. (Make certain that milk replacer contains a high level of antibiotics to avoid scours and other digestive disorders).

### **Method of Feeding Milk Replacers**

- ❖ Use nipple feeder pails to prevent the lamb from gulping milk and to reduce digestive upsets. However, if the nipples and valves are not properly cleaned, possible bacterial infection may out-weigh all advantages obtained from their use. Keep the lamb pails as clean as the dishes you eat from.
- ❖ Recent research has suggested that lambs perform better on cold milk (35-40 degrees) than warm milk. Cold milk does not sour as quickly and lambs consume only a small amount of cold milk replacer solution at each nursing, but much more often. This reduces digestive problems. The one problem with feeding cold milk is getting the lambs to start nursing adequate amounts. Warm milk may be used the first week and cold milk thereafter. In a free-choice system, each lamb will consume ½ to ¾ pounds of milk replacer powder in solution daily (2-4 pints of liquid milk).
- ❖ Research results have not shown any advantage for feeding more often than twice daily after lambs are one week old if lambs are hand fed.
- ❖ Restrict intake of milk replacer after lambs are two weeks old to encourage consumption of dry feed.
- ❖ The lamb should gain ½ - 2/3 lb. daily while on milk replacer.
- ❖ Lambs should be provided constant access to fresh water and high quality palatable solid feed to accustom them to eating dry feed and to minimize weight losses during the weaning period.

### **Starter Rations**

- ❖ The following ration has proven quite satisfactory for encouraging young lambs to eat and could be fed until lambs reach about 60 pounds.

<b>INGREDIENT</b>	<b>PERCENT</b>	<b>POUNDS</b>
Ground Shelled Corn	45	900
Ground Alfalfa Hay (good quality, 18% protein minimum)	20	400
Soybean Meal	25	500
Molasses	8	160
Bone Meal	1.5	30
Trace Mineralized Salt	0.5	10
Aureomycin or Terramycin	2.5 grams/100 lbs.	2000 plus 50 grams of Aureomycin or terramycin

- ❖ As soon as the lambs are eating dry feed well, wean them to a high quality, dry ration and manage them as early weaned feeder lambs. Lambs can be weaned from milk feeding at 25-30 pounds body weight or when they are 30-45 days of age. Lambs have been weaned successfully at lighter weights and fewer days of age. Post weaning rations, until lambs reach about 60 pounds, should be high in protein (15-20%) and energy. See Table 1 for nutrient requirements.
- ❖ There is some evidence that antibiotics help reduce the incidence of enterotoxemia (Ott, 1968). Chlortetracycline can be used at a level of 22 mg/kg of feed for this purpose and oxytetracycline can be used at a level of 25 mg per lamb per day.
- ❖ When lambs are unthrifty, check for external and internal parasites.
- ❖ Vaccinate for enterotoxemia. A second vaccination 2 weeks later may be advisable.

**Table 1 - Nutrient Requirements of Sheep**

Nutrient Concentration in Diets for Sheep (expressed on 100 Percent Dry Matter Basis).

<b>Nutrient Concentration in Diets for Sheep (expressed on 100 Percent Dry Matter Basis)</b>											
Body Weight	Weight Change/Day	Energy			Example Diet Proportions		Crude Protein	Calcium	Phosphorus	Vitamin A Activity	Vitamin E Activity
		TDN %	DE (MCal/Kg)	ME (MCal/Kg)	Concentrate %	Forage %					
(lb)	(lb)						%	%	%	(IU/kg)	(IU/kg)
<b>Early Weaned Lambs - Moderate and Rapid Growth Potential</b>											
22	0.55	80	3.5	2.9	90	10	26.2	0.82	0.38	940	20
44	0.66	78	3.4	2.8	85	15	16.9	0.54	0.24	940	20
66	0.72	78	3.3	2.7	85	15	15.1	0.51	0.24	1,085	15
88-132	0.88	78	3.3	2.7	85	15	14.5	0.55	0.28	1,253	15
<b>Lambs Finishing - 4 to 7 Months Old</b>											
66	0.65	72	3.2	2.5	60	40	14.7	0.51	0.24	1,085	15
88	0.60	76	3.3	2.7	75	25	11.6	0.42	0.21	1,175	15
110	0.45	77	3.4	2.8	80	20	10.0	0.35	0.19	1,469	15

## **EXAMPLE RATIONS**

<b>Rations for Feeder Lambs ( 60-90 Pounds) - Approximately 15% Protein As Fed</b>				
INGREDIENT	POUNDS	PERCENT	POUNDS	PERCENT
Ground Shelled Corn	860	43.0	1500	75.0
Ground Alfalfa Hay (At Least 15% Protein)	800	40.0	Hay Fed Free Choice	
Soybean Meal	200	10.0	350	17.5
Molasses	100	5.0	100	5.0
Dicalcium Phosphate	30	1.5	40	2.0
Trace Mineralized Salt	10	0.5	10	0.5
Total	2000 Pounds	100	2000	100
Add 20 mg Antibiotics Per Animal Per Day or 20 Grams Per Ton of Feed				

<b>Finishing Rations (90 pounds to finish) - Approximately 12% Protein as Fed</b>				
INGREDIENT	POUNDS	PERCENT	POUNDS	PERCENT
Ground Shelled Corn	1260	63	1725	86.25
Ground Alfalfa Hay	500	25	Hay Fed Free Choice	
Soybean Meal	100	5.0	135	6.75
Molasses	100	5.0	100	5.0
Dicalcium Phosphate	30	1.5	30	1.5
Trace Mineralized Salt	10	0.5	10	0.5
Totals	2000	100	2000	100
Add 20 mg Antibiotics Per Animal Per Day or 20 Grams Per Ton of Feed				

## **FEEDING DIRECTIONS**

1. Lambs should be brought up to full feed gradually.
2. The amounts given are to be divided into two equal daily feedings.
3. Reduce the amount of grain fed immediately if lambs leave some grain from one feeding to the next.