



Manual

4-H

BUCKET CALF PROJECT

PURPOSES:

1. To design a cattle project to fit the physical size and maturity level of younger youths.
2. To teach proper health care and nutritional requirements of young cattle.
3. To teach basic beef management skills without a large investment.
4. To teach basic record-keeping skills.
5. To provide a better understanding of the feeder cattle industry.
6. To provide a short-term project for those not ready to commit to a long-term project.

GUIDELINES:

1. **BUCKET CALF** - An orphan or newborn calf (no more than 1 week old); male or female: dairy beef or cross, fed on bucket or bottle.
2. **BEGIN PROJECT** - Select and/or purchase a calf born within 10 days of time project will begin. The project must begin after Oldham County Stock Show in January, but calves must be tagged (validated) and reported to County Extension Agent and 4-H Project Leader before **August 15** of the current year. The project will be completed at the Oldham County Stock Show. Please let project leader and county agent know as soon as you get your calf so your leader can tag the calf.
3. **END PROJECT** - Project will end after awards presentation at the Oldham County Stock Show.

NOTE: If calf dies within one week after deadline for project, another calf may be obtained for a project. If calf dies after one week of deadline project will be discontinued for that term. Participants may wish to turn in a project record form at that time and consideration by judges will take place.

4. **RECORDS** - Bucket Calf forms will be provided through County Extension office. These forms must be completely filled out and turned in to the County Extension Agent by the time requested.

5. COMPETITION GROUPS - (who is eligible)

The Extension Agent and Leader will decide on age groups to best divide 4-H members for fair competition and to be separated to make Stock Show Classes a similar number.

6. JUDGING - Judging will be based on:

1. Record form turned in - 25%
2. Personal interview by judge(s) on care of calf and knowledge obtained - 50%
3. Showmanship - 25%

NOTE: The animals conformation is never judged but his care and appearance will affect the Showmanship.

7. AWARDS - Every participant will be recognized for participation in the Bucket Calf Project at the Oldham County Stock Show. Ribbons will be awarded to the participants in each age division. Champion Bucket Calf trophy for overall winner will be awarded to one Bucket Calf participant.

NOTE: PeeWees are not eligible to compete for the overall trophy or to sell in the premium auction.

8. AGE OF PARTICIPANT - This project is designed for youth grades 3rd through 6th.

9. OTHER PROJECT ASSISTANCE:

1. Project Leader
2. Oldham County Extension Agent AG
3. Veterinarian
4. Feed Company Nutritionist
5. Veterinary Science Project Material
6. Beef or Dairy Project Material

Care of Newborn Calf

1. Provide clean well-bedded pen, free of drafts.
2. Swab the navel with tincture of iodine as soon as calf is born.
3. Provide colostrum to the calf for at least three days. (First milk produced by the dam.)
4. If unusual health problems exist, vaccinate, give antibiotics and Vitamins A and D by injection.

Feeding Recommendations

Colostrum - The need for and benefit of Colostrum cannot be over-emphasized! A source of colostrum should be obtained from a dairy and frozen for use if calf 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 first day after birth, it is essential that the calf be given colostrum during the first 24 hours of life (first 12 hours preferred).

Antibiotics - Feeding antibiotics (terramycin or aureomycin) stimulates the growth of young calves and reduces the incidence of calf scours. Feed recommended levels (50-100mg ONCE-A-DAY) in the milk, starting with the first bucket feeding. Antibiotics should be also contained in the calf starter ration (see Table 3).

Table 2. A Good Grower Ration
(After four months of age)

Ingredients	Amounts
Corn (ground) or Grain sorghum (rolled).....	700 lbs.
Oil Meal (soybean or cottonseed).....	100 lbs.
Bonemeal (or calcium-phosphorus supplement).....	7 lbs.
Trace Mineralized salt.....	7 lbs.

Table 3. Antibiotics for Calf Feeding

Supplement	Grams per Pound of Supplement	Amount of supplement Amount fed each calf, once daily during milk feeding period	required to furnish 15 grams antibiotic per 1,000 lbs KS Calf
Starter			
*AUREOMYCIN	(grams)	(grams)	(teaspoons)
(pounds)			
Aurofac 25	25.0	1½	½
0.6			
Aurofac 10	10.0	3	1
1.5			
Aurofac D	5.0	6	2
3.0			
Aurofac 2A	3.6	8	3
4.2			
Aurofac	1.8	16	5
8.4			
**Aureomycin Crumbles	2.6	**10	**3
5.8			

***TERRAMYCIN			
TM - 50	50.0	¾	¼
0.3			
TM - 10	10.0	3	1
1.5			
TM - 5	5.0	6	2
3.0			
TM - 3.6	3.6	8	3
4.2			
TM - 3+3	3.0	9	3 ½
5.0			

*American Cyanamid Co.

**Does not mix well with milk

***Charles Pfizer and Company

Table 4. Cost of Raising a Bucket Calf¹

Birth to 3 months of age			
Milk ²	250 lbs @ \$	/cwt=\$	_____
Starter	300 lbs @ \$	/cwt=\$	_____
Hay	40 lbs @ \$	/cwt=\$	_____
Three months to 6 months			
Concentrate mixture	360 lbs @ \$	/cwt=\$	_____
Hay	380 lbs @ \$	/cwt=\$	_____
Six months to 1 year			
Concentrate mixture	540 lbs @ \$	/cwt=\$	_____
Hay	1 ton @ \$	/cwt=\$	_____
Estimated feed cost		\$	_____
Estimated overhead, labor, etc.		\$	_____
Estimated cost or raising bucket calf		\$	_____ ³

¹Cost will vary according to type of program, cost of feed, etc.

²This cost can be replaced if surplus colostrum is stored for later use. Also, a good milk replacer will often be more economical to use than marketable whole milk.

³Does not include original cost of calf.

YOUR ROLE WITH THE COUNTY EXTENSION AGENT

1. Your Project will be periodically checked by the County Agent.
2. The County Agent will discuss feeding improvements upon request and visits.
3. All calves will be weighed and ear-tagged on or about September 1.

Management

1. Identify calf immediately after birth. The state 4-H logo eartag may be used.
2. Dehorn calves when the horn button can be felt. The electric de-horner is the method of choice. Caustic potash or dehorning paste may also be used.
3. Extra teats on dairy heifer calves should be removed as soon after birth as possible. The extra teat should be thoroughly disinfected with iodine and snipped off close to the body wall with very sharp shears. Disinfect the wound.
4. In mild weather, calves may be exercised out-of-doors, but exercise is not absolutely necessary for pre-weaning calves.
5. Use nipple feeder pails to prevent the calf from gulping milk and to reduce digestive upset. However, if the nipples and valves are not properly cleaned, possible bacterial infection may outweigh all advantages obtained from their use. Wash and sterilize calf pails. Keep the calf pails as clean as the dishes you eat from.
6. After calf is weaned, it could be grouped according to age in a large pen with others. See that all calves actually eat their fair share.
7. Observe groups of calves frequently for sucking.
8. When calves are unthrifty, check for external and *internal* parasites.

Some Points About Calf Feeding:

1. Give the calf colostrum starting immediately after birth for at least the first three days of life. Leaving calf with its mother for three days if possible would be most desirable.
2. Do not overfeed or underfeed calf. Weigh or measure milk--follow feeding recommendations. Feed milk once or twice daily at regular intervals. Warm milk to 100°F, especially during the first three weeks.
3. Use nipple feeder pail to prevent calf from gulping milk. However, nipples, valves and buckets must be washed and sanitized to prevent bacterial infections. Calf disease can also be passed from one calf to another by the nipple feeder.
4. Always have fresh water available in clean pail or from automatic drinking cup after calf is about three weeks old. Water pail should be in the front of the pen, opposite from the feed.
5. After calf is weaned, keep trace mineralized salt before it at all times.
6. Do not depend on silage as a source of feed for calf under 6 months of age. Silage should not constitute all of the roughage after 6 months of age.
7. Do not depend on pasture as a source of feed for a young calf, except under the most favorable conditions. Too often a calf is neglected and undernourished on poor pasture.

Good pasture nearby the barn with shade and water can be a satisfactory supplemental feed and provide the calf exercise and clean quarters.

UNIFORM FEEDING IS ONE OF THE
ESSENTIALS IN RAISING A THRIFTY CALF

Housing

1. Place calf in a pen (4' X 6') until weaned. Keep pen well-bedded and free from drafts.
2. Thoroughly Clean and re-bed pen frequently.
3. Equipment used for feeding in calf pen should be constructed of materials that are easily cleaned.
4. Place drinking cups and feeding boxes so that top is about 20" from the floor.