



Care and Management of Calves at Weaning

W. D. Frischknecht, Extension Animal Scientist, Oregon State University

J. D. Mankin, Extension Animal Scientist, University of Idaho

The main objective of a weaning program is to get the calves separated from their mothers and on their own as simply and efficiently as possible. The first requirement is for tight fences to control both cows and calves. Calves are usually weaned at about 7 months of age.

Some successful operators will, before weaning, put the cows and calves in a pasture that will be home for the calves after weaning. At weaning, then, they separate the cows and move them to a different location. This leaves the calves in familiar surroundings where they are accustomed to watering facilities and supplemental feeding, if any. This system works well, but will not be possible for all producers.

The other option is to remove the calves and put them on pasture or drylot separate from their mothers. Again, tight fences are essential. The weaning process is also easier if calves have been fed some supplemental feed before weaning. Some very successful operators feed hay on the ground or in feed mangers to cows and calves for several days before weaning to get the calves accustomed to eating hay.

Adequate water is also essential for the calves. If they have not been accustomed to drinking from a trough before weaning, it is a good idea to let them hear running water splashing into a trough in the new lot.

Stress at Weaning

Weaning is a time of stress for both cows and calves. When they are separated, the cows will continue bellowing for about 3 days. After that they will settle down and get accustomed to the separation. Stress on the calves will be greatly reduced if they are eating solid feed and drinking the necessary water.

To help minimize weaning stress on the calves, most of the common health programs should be done at times either before or after weaning. For example, most producers brand their calves before moving them out on range. That is also a good time to dehorn, if necessary, and castrate the bull calves. Usually, calves are also given blackleg and other routine calfhood vaccinations at the same time.

Brucellosis vaccination for heifers is routinely done at less than 8 months of age, so this vaccination also fits in well with a preweaning health program.

Parasite control applications can be scheduled at times other than weaning. Worming calves for internal parasites and treating to control lice and grubs are good management practices that can be done any time after weaning and before winter sets in.

If these practices have been followed, then the calves at weaning need to be given only the recommended booster shots.

Other Considerations

In herds on an individual performance testing program, calves should be individually weighed at weaning. While they are in the chute, check tattoos to make sure they are legible and insert ear tags if needed. Many calves are individually identified at birth, but the identification may need reinforcing at weaning.

For producers who sell weaner calves, weaning time is also a good opportunity to use the USDA Bright Orange Ear Tag that lets you participate in that carcass evaluation program. Carcass information is returned on the orange-tagged animals, if they are slaughtered at a plant served by a USDA meat grader. Some producers are getting a high percentage of carcass information returns.

If calves will be sold and shipped soon after weaning, this is the time to start preparing them for shipment. Give them the prescribed health treatments and get them started on feed. Then feed the calves before shipping. Most trials indicate that calves with considerable energy in their digestive system are able to withstand shipping better than calves that are in a poor state of nutrition. The advice of most cattlemen is to feed before shipping.

It is also good management to reduce time in transit if possible. Long hauls with no feed and water are critical for calves. If calves have to be loaded and unloaded, they should be handled as easily and as quietly as possible. Too much excitement, too much dust and too many bruises contribute to a lot of calf health problems.

After weaning it is helpful if calves can be kept in fairly small groups of about 50 to 60 head or less per lot. Exceedingly large weaning lots may cause calves to walk the fence rather than settle down. Placing bales of hay or mangers along the fence lines at strategic locations will stop the fence walking.

If some calves become sick in the weaning process, they should be isolated from the larger group, and placed in a pen where they can be given proper care and medication. Clean corrals and pens will help promote proper sanitation.

Early Weaning

Several trials indicate early weaning can be a sound practice when feed supplies are short. Early weaning is considered to be any time earlier than the normal weaning age of about 7 months, although some ranchers regularly wean calves from first-calf heifers at about 5 months of age. In an average year on most western ranges, calf gains during May and June are about 2 pounds a day; during July, about 1.5 pounds, and during August, about 1 pound per day. After September 1, calf gains are slow on most ranges. During late summer and autumn many ranges become extremely short of both feed and water, so early weaning should be considered.

Under these conditions, early weaning has some advantages. The cows gain weight when not nursing calves, so they go into winter in better shape. Dry, non-lactating cows need less water than those nursing calves, so dry cows range farther away from water. Dry cows can go to water every other day and still thrive, but cows nursing calves need water every day because of the milk requirements. In areas where feed and stock water shortages create a problem, cows could be left on the range and calves could be weaned and fed in drylot — a corral or feedlot — or placed on irrigated pasture if available.

Work at Oregon State University's Eastern Oregon Agricultural Research Center at Union compared post-weaning gains of calves weaned September 17 and others weaned at the ordinary time of October 15. The early-weaned calves were placed on good pasture and gained 1.1 pounds a day from September 17 to October 15. Those on range with their mothers gained less than .5 pound. After October 15, gains averaged 1.2 pounds a day for all calves, so weaning stress was minimal for both groups. The early-weaned calves gained 21 pounds more per head during the fall grazing period from September 17 to November 18.

In this trial, the early-weaned calves were nearly 6 months of age at weaning time and average weight was 440 pounds. They were previously weighed August 20, when about 5 months of age, and average weight was 373 pounds. At this weight and age they could have been weaned and put on good pasture had range feed been short. The fact that they gained more than 2 pounds a day while nursing shows that early weaning is not a good answer when feed is plentiful and cows are milking well.

By the time calves are 120 days of age the rumen is working sufficiently so that calves can be weaned and make satisfactory gains without the benefit of milk. By this age calves on pasture probably are obtaining more than one-half of their nutrition from the natural forage.

A weaned calf normally consumes about 3% of its body weight as feed each day. By the time the calf weighs 300 pounds it will eat about 8 to 9 pounds

Table 1. Suggested rations for 450-pound weaner calf gaining 0.7 pound per day.

Ration combinations (alternatives)	Pounds
Alfalfa	10
Oats or beet pulp	2
Native meadow grass, bluegrass, oat or barley hays	8
Oats or beet pulp	3
Cottonseed meal, soybean oil meal or 36% protein supplement (liquid or dry)	1
Wheat hay	5
Oats or beet pulp	5
Cottonseed meal, soybean oil meal or 36% protein supplement (liquid or dry)	1
Native meadow grass, bluegrass, oat or barley hays	5
Corn silage or grass silage (28% dry matter).	10
Note: silages should be limited in rations for calves.	
Cottonseed meal, soybean oil meal or 36% protein supplement (liquid or dry)	1

per day of a ration that is 50% high quality roughage and 50% grain. The amount of roughage can be varied from 35 to 65% depending on availability of feeds.

A ration that has given excellent results with weaned calves is 2 pounds barley, 1 pound cottonseed meal plus free-choice grass hay, which will range from 8 to 12 pounds depending on the size of the calf. Table 1 lists 4 possible ration combinations for weaner calves.

Calves have been weaned successfully at less than 2 months of age, but that is younger than is practical or necessary under most conditions. A Kansas drylot study for 107 days compared gains of calves weaned at 50 days of age, calves creep-fed in drylot while still nursing and nursing calves in a drylot but not creep-fed. Early-weaned calves gained an average of 278 pounds, creep-fed nursing calves gained an average of 264 pounds and non-creep-fed nursing calves gained an average of 116 pounds. This study was in drylot, but it does point out that the combined energy efficiency of cow and calf was best for the early-weaned group. Early-weaned calves and their mothers consumed 17.2 pounds of total digestible nutrients (TDN) per day for a feed requirement of 6.8 pounds TDN per pound of calf produced. The creep-fed group consumed 17.6 pounds TDN daily, for a feed requirement of 7.3 pounds TDN per pound of calf produced. The non-creep group consumed 15 pounds TDN daily, for a feed requirement of 14.3 pounds TDN per pound of calf produced. The rations are shown in Table 2.

Table 2. Rations for early-weaned calves in Kansas study.

Ingredient	Starter ration	Standard ration
	Pounds	Pounds
Rolled oats	436	1,300
Rolled corn	742	366
Dehydrated alfalfa		92
Calf Manna ¹	305	
Wet molasses	65	61
Dicalcium phosphate	11	
Limestone	11	
Soybean oil meal	436	84
Dry molasses		51
Pre-mix ²	22	
Salt	22	10
Aurea-10	15	14

¹Calf Manna milk replacer is made by Albers Milling Co.

²Pre-mix, pounds per 1,000 pounds: soybean oil meal, 444; ground oats, 443; vitamin A, 33; Aureomycin-10, 30; trace mineral, 50.

The starter ration was used only for calves weaned at 50 days of age. At 100 days of age these calves were gradually taken off the starter ration and put on the standard ration used for the creep-fed calves.

Calves weaned at 3½ to 4 months of age do not require a milk replacer, but they need a palatable and nutritious ration. Calves should not be weaned under 5 months of age unless there is a real emergency.