

# Management and Treatment of the Weaner-Stocker Calf in Montana

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I spent a lifetime with this "stocker problem."

Calves get sick because it is too cold. How do we deal with existing conditions?

The management and treatment of weaner-stocker calves in Montana are directly related to our mountainous areas. In western Montana we have mountain valleys at 5-7 thousand feet. The summers are short and the winters long and cold. So, our problems have a direct connection to the changing weather pattern. From warm to cold in a matter of 12 hours with the onset of a sudden storm. In Montana we wean over 1¼ million calves each year with about 95% being weaned in October and November. Many of these calves go to cornbelt feedlot operators, but a great number are wintered on ranches and feedlots in the state. It is one of the few states left where the ranchers keep the calves and run them as yearlings until they weigh 500-650 lbs.

These are wintered on whether they go on to grass in spring or to a feedlot.

The winter feeding period is about 180 days long from weaning in October or November until April or May, when the calves can go back to grass. The rancher has three possible options for these calves in spring, depending on weaning weight winter gain—he can send them to grass or feedlot (2 way calves) or only to a feedlot (too heavy to go on grass). This is influenced by the feedstuffs available in winter, quantity of grazing available next summer and the assessment of the cattle market. All these factors have a direct bearing on the herd health and the herd health program.

We all know the importance nutrition plays in a herd health program, and it is particularly important to the weaner-stocker calves in our area. Because of the cold winters we need high protein feeds and these are expensive. Many of our calves are in the higher mountain valleys and are lightweight. They are born in April or May. They weigh about 350-380 lbs. at weaning and are too small to digest enough 6-8% protein wild grass hay in subzero weather to make sufficient gain. This leads to nutritional and eventually health problems. The majority of our operators who run calves on grass are more concerned about summer gains

than winter gains, since summer pasture is cheaper than winter feeding. We don't have any vaccines to protect against subzero weather and Montana "hollow belly"! Our climate often goes to extremes, so it is hard to set down rules for management. Each case must be dealt with individually. Each rancher has to prepare one year prior to conception in order to have fewer weaner problems. Calves born in two heat periods (42 days) are more consistent in size and have fewer nutritional problems (March-April calving). Later calves weaned at four months still require a lot of milk, so it is difficult to wean them without adding a lot of stress. So we manage the herd so that there are very few of these small, late calves.

Adequate facilities, feed and water, are essential.

The water problem is serious in our area. We must outguess the weather (if possible!)—wean them without being caught in a snowstorm!

The most common problems we have in weaning calves are the respiratory ailments, generalized septicemia, coccidiosis, pink eye and urinary calculi. Respiratory problems usually come within three weeks of weaning when pneumonia and diphtheria develop. Septillmic conditions arise from stress and usually end up in pneumonia. Coccidiosis is a problem we have to fight all winter—change of feed, cold weather. Urinary calculi are very troublesome in some ranches but not in others even in the same valley. Late castration helps to avoid these problems because the urethra is better developed.

We have used all the available vaccine and bacterius during the past 25 years, but the results have been variable.

The preconditioning program has been difficult to get going in our area. It appears we were doing it, though, without realizing it! Nearly all our calves are worked in the spring—castrated, dehorned, blackleg vaccinated, branded, etc. There has not been enough benefits compared with the problems we would encounter in trying to work calves in the fall. We prefer to work them two to three weeks before weaning, but we have to outguess the storms!

We have found the IBR and BVD are gradually becoming more prevalent in our area. However, not much exist on ranches, so very few are vaccinated for anything but blackleg, malignant edema, pasteurella triple vaccine.

We autopsy calves in the presence of the rancher. Most of them are the usual disease problems, and we like to show the rancher that he does not have a new disease but that they were too advanced for treatment to be effective.

Our treatments are on conventional lines. If we

have a good man on the outfit, we let him treat I/V., otherwise I/M.

To summarize, in our area, with the vaccines that are available, the proper handling and management of the cattle from prior to conception through until weaning is the greatest aid to getting the weaning job done and going through the winter with a minimum of problems.

(Dr. Schaffner's talk was illustrated by several slides.)

## From the Ranch into the Feedlot

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### Introduction

One of the main problems in the feeding industry today is the shortage of 600 to 800 lb. feeder cattle. The solution seemed simple—buy next year's feeders as calves. The advantages of calf feeding were less dollars invested and cheaper cost of gains due to improved feed conversion. With calves coming off the ranches from all parts of the nation, death losses became alarming. It soon became apparent that a 4% mortality was an average acceptable death loss. The inclement weather and other factors, some pneumonia outbreaks reached mortality rates as high as 15 to 40%. The yards looked to the veterinary profession to help solve these problems. The discussion of this paper will be limited to the handling of calves from the ranch into the feedlots.

### Bovine Respiratory Disease

Bovine respiratory disease (BRD) accounts for the majority of death loss in feeder calves. Before we can discuss the solution to this problem, we must first ask ourselves, "Why do apparently healthy ranch calves get sick?" The formula for shipping fever or pneumonia has been well established as stress + viruses + bacteria = shipping fever. The best place to exercise this formula is our present means of handling calves. A susceptible ranch calf is sold in a disease contaminated sale barn and hauled in a questionable manner to a feedlot many miles away. There the calf experiences what we call "processing" and is

yarded in a pen next to calves that are already having what is known as a "wreck." Needless to mention, most pens are not designed to give the calf any protection from inclement weather.

Emphasis has been placed on attempting to break this disease cycle by developing immunity against various viruses and the *Pasteurella spp.* Knowledge of bovine immunology has been broadened with these efforts, but the same old problem still exists. Vaccinating is sound judgement, but a large percentage of calves are exposed before they arrive or shortly thereafter, and thus not allowed enough time for immunity to develop.

To explain the shipping fever formula in more detail, let's examine each part.

#### I. Stress:

Handling calves from the ranch to the feedlots creates a traumatic experience we call stress. Some of these can be listed: 1) weaning, 2) mental fatigue, 3) dehydration, 4) castrating and dehorning, 5) physical fatigue, 6) inhalants—dust and truck fumes, 7) hunger, 8) fright, 9) diet change—including water, 10) overheating, 11) chilling, 12) dampness, 13) vaccination, 14) insecticides, especially organic phosphates.

The stress syndrome is not fully understood, but it apparently does lower the body resistance to infectious agents.

#### II. Viruses and/or Non-Bacterial Agents:

This group is so large that only a few of the