

The Condition of Live Stock on the Western Ranges

From a bulletin issued by the National Live Stock Association on March 3rd we take the following: "For the past month the headquarters of the National Live Stock Association has been engaged in gathering reports of the condition of live stock on the western ranges. These reports include almost the entire West, and cover loss from winter weather and storms, together with general conditions for the spring. Owing to the incomplete condition of this work it was not intended to make public results until later, but as there have been many conflicting reports published, and these headquarters are besieged with inquiry for facts, it is thought best to publish information thus far received. It is well to state, however, that while reports up to this time are much more favorable than generally expected, the danger period is not over. While most of the cattle have wintered well, the winter has been of unusual severity, and while losses are light thus far, the cattle are as a rule very weak and in poor condition to withstand severe storms of the spring. One of the worst features in the outlook is the scarcity of forage reported from many districts. Very early grass is an absolute necessity to keep many of the cattle alive.

"The 'cattle of commerce,' or, more intelligently speaking, cattle in the feed lots, do not enter into this question in any manner, as the agricultural districts have sufficient feed to carry these animals through the winter with only nominal losses.

"With the exception of Montana, reports have been received from leading stockmen, and are considered accurate as far as they go. . . . The heaviest losses have been with so-called 'through cattle,' that is, cattle being moved north from the south. Where the cattle went into the winter in bad condition, the mortality has been heavy, reaching in some sections as high as 20 per cent. Taking the range section as a whole, to the present time, the losses will average 4 per cent. With the most favorable conditions that can be expected an additional loss of 2 per cent. may be looked for before spring, and should the weather continue bad through March a heavy loss will certainly result.

"The department of agriculture reports that there were in the neighborhood of 13,000,000 head of cattle in the range country on January 1st, 1899. Assuming that this is correct, 6 per cent. of this number would indicate the destruction of 780,000 head of cattle during the present winter.

"One feature of the reports received is the scarcity of steers above the age of two years which seems to prevail generally over the West. Some sections, notably Texas, reports a scarcity of all classes of cattle, but outside of old steers the shortage is not pronounced, and many sections report plenty of young stock.

"Final conditions on the opening of spring depend entirely upon the weather for the next six weeks. It is too early to give anything more than a bare estimate of conditions as they now exist.

Treatment of Winter-injured Trees

In a recent bulletin the Kansas Experiment Station gives the following for the treatment of winter-injured trees: "Where trees are merely injured, the real damage done to the orchards will depend greatly upon the treatment given them from this time. Trees that are killed should be removed at once from the orchard. If they can be used for fire-wood, well and good; if not, they should be piled and burned to destroy any insects or disease that may infest them. Trees that are partly top-killed are weakened and deadened throughout, and should be heavily cut back, the extent depending upon the degree of injury. In many cases it will be necessary to cut back to the main branches or even to the trunk, but where the injury is less severe the cutting may be confined to the smaller branches of the tree.

Though the branches of an injured tree may not be killed, it is advantageous to cut them back, because the wood that is browned and deadened can never perform its life functions again. It becomes as heart-wood and must be enclosed by a layer of new wood. The quicker we can get this deposit of new wood the better and the more of it the better. By cutting off the branches of the tree, it is reduced in surface and the new wood is more rapidly deposited on the parts that remain. The energy that is spent in blossoming is also saved to the tree by the severe pruning. It is necessary to prevent the vitality of the tree from dissipating itself in any way, and to husband and apply it so as to restore the tree quickly to its normal process of growth.

"Trees treated in this way will rapidly regain their vigor unless the injury is very serious. They will also quickly resume their normal habit of growth and shape. Cutting back the last year's growth in the winter is especially beneficial to the peach, whether it has been injured by cold or not, as its branches tend to grow long and slender, and in bearing fruit near the extremities they break and split and are ruined. Where blackberries and raspberries have been killed back to the ground, the canes should be cut out and burned.

"A difference in opinion exists as to the best time for cutting back injured trees: some growers prefer to have the work done before the leaves open, others choose a later time; but the safe way is to do it early. As soon as the degree of injury is known, therefore, we may wisely begin the pruning. If left till a later time, other work may crowd it out entirely, with the result that the orchard is lost. A saw and tree pruners are the tools to be used. It will be beneficial to carry along a keg of white lead and apply a coat of the lead to the wounds made. This will keep out the air, prevent the wood from checking, and retard evaporation from it. All pruned-off wood should be removed from the orchard and burned.

"The process here described will not save all the trees that have been injured, but, if done with care, it will save many, and those that die after the treatment is given will probably die in spite of rather than because of it.

Alfalfa for Fattening Hogs

Last fall the Kansas Experiment Station made an experiment to test the feeding value of alfalfa hay when fed to hogs. The hogs fed in this experiment were bought of farmers and averaged 125 lbs. each. They were placed in lots of ten each, in large pens. The alfalfa hay used was of the best quality, carefully cured. Black hulled white Kaffir corn was the grain fed, the hogs being fed all that they would eat without waste. The hay was fed dry in large forkfuls in a large trough. The pigs were given more than they would eat. One lot of hogs were fed Kaffir cornmeal dry and alfalfa hay; one lot whole Kaffir corn dry; one lot Kaffir cornmeal dry, and one lot Kaffir cornmeal wet. The experiment began on November 24th, and lasted nine weeks. At that time the alfalfa-fed hogs were ready to be marketed, while those fed grain alone would have required four or five weeks' more feeding to get them in good marketable condition.

The gains in nine weeks from the different methods of feeding were as follows:

Gains per hog in pounds.	
Kaffir corn meal dry and alfalfa hay.....	90.9
Kaffir corn whole.....	59.4
Kaffir corn meal fed dry.....	51.4
Kaffir corn meal fed wet.....	63.3

The gain from feeding alfalfa hay with Kaffir corn meal fed dry, over the meal alone fed dry, is more than seventy-three per cent. The gains per bushel of feed were as follows:

Pounds.	
Kaffir corn meal dry and 7.83 pounds alfalfa hay....	10.88
Kaffir corn whole.....	8.56
Kaffir corn meal fed dry.....	7.48
Kaffir corn meal fed wet.....	8.09

The hogs in nine weeks were fed 656 pounds of alfalfa