

Livestock and Dairy

Knowing the Market Demands and Raising Stock to Meet It.

THAT at least one-twentieth of all the stock bred on the open range of the west dies before it reaches market age and that much of this loss can be stopped is shown by results reported from the national forests. This waste is said to add millions of dollars to the people's meat bill and gives one more cause of the high cost of living. Winter storms and Summer droughts strew the ranges with the bones of cattle and sheep; predatory animals take a heavy toll; poisonous plants sometimes kill half the animals in a herd almost over night. Cattle contract anthrax, blackleg and other diseases, get stuck in bog holes, slip off icy hillsides; and sheep pile up and die of suffocation. Insects which madden and kill swell the total losses as do a multitude of other minor causes of death and injury.

How Disease is Prevented.

If any of the animals to be grazed upon a national forest seem to be suffering from disease, the stock is subjected to a rigid inspection by the federal bureau of animal industry before it is allowed to enter the forest. If an animal grazing on the forest develops suspicious symptoms the permittee is requested to remove it. The carcasses of animals dying from infectious or communicable diseases must be buried or burned, preferably the latter. To protect their stock against blackleg permittees are encouraged to use vaccine, furnished free by the department of agriculture. Sheep suffering from scab or from lip and leg disease are barred from the forests until they have been treated in conformity with the requirements of the bureau of animal industry. This co-operation between the two bureaus has made it possible to keep the forest ranges remarkably free from all forms of stock disease.

Stock Killed by Wild Beasts.

The settlement and development of the west does not appear to have greatly reduced the number of animals which prey upon domestic live stock, and the loss from that source alone runs into the millions of dollars each year. Within the forests, however, the number of domestic animals killed has been appreciably reduced by the campaign against wild animals waged by the officers of the service. During the past eight years forest officers have killed over thirty-five thousand predatory animals, consisting of coyotes, wolves, bear, mountain lion, wild cats, lynx, etc.

Poisonous Plants.

The losses due to poisonous plants have been in the aggregate the most numerous and the most difficult to guard against. Stockmen know generally that certain flats or valleys or hillside slopes could not be used for grazing without heavy losses of stock, but there was much doubt as to what caused the loss. Gradually it was determined that the losses were due to various species of plants. Later, it was learned that in most instances these plants, while extremely poisonous during certain periods of the year, were comparatively innocuous during the remainder of the grazing season. The forest officers determined the various plant species which cause death or injury of live stock, the periods during which each species is dangerous, and the areas of forest land upon which the plants are sufficiently abundant to cause losses of stock. The next step was to devise ways and means of preventing the losses. Where definite information is obtainable the outer limits of the poison areas are marked by warning placards which give the name of the poisonous plant, the kind of stock to which it is injurious, and the period during which it is most harmful. With this warning, stockmen are enabled to so handle their stock as to prevent the occupancy of the poison area during its danger period. In cases where the areas of poisonous plants are comparatively small the permittees have been encouraged to fence them, material for fence construction being furnished free of charge by the forest service. The result of this work has been to reduce the number of animals lost through poisonous plants as compared to the numbers lost several years previously.

Losses From Poison Unpreventable.

Notwithstanding all precautions which may be taken against stock poisoning, losses from this source must be expected. During the past several years the bureau of plant industry has been making a

study of poisonous plants and of antidotes. In the case of larkspur, for example, the bureau has determined methods of treatment which are reasonably successful, under normal conditions. The only difficulty has been that the animals suffering from poison are generally out upon the open range and may not be observed by their owner until it is too late to apply an antidote. The forest service has, therefore, arranged to meet this situation in an experimental way by equipping a limited number of rangers with hypodermic syringes and the necessary chemicals. Armed with this equipment a forest officer can in a few moments administer a treatment which may save a \$40 steer.

White Scours.

This disease may show itself within a day or two after the calf is born. This disease is quite distinct from diarrhea caused by mistakes in feeding. Usually the calf manifests but few evidences of life, and will be found lying stretched out in a semi-conscious condition, the bowel discharges of a whitish color and very offensive, and the calf dies within a few hours. The disease is highly contagious. The thing to do is to get busy and prevent its spread. Destroy by burning the calves that have died. Thoroughly disinfect the stables. Until this has been done remove all the cows yet to freshen into new quarters. Spray the bedding material with a carbolic solution (1/2 oz. to the quart.) At once tie the navel string of the newly born calf with a cord saturated with the carbolic solution. The stump of the cord should then be washed with the following solution: iodine, 1/2 dram; iodide of potassium, 1/2 dram; water, 1 quart. Wherever this disease develops a thorough disinfection of the stall should immediately follow. Formalin is a simple disinfecting agent; use 1 part of formalin to 30 parts of water when it can be used as a wash or a spray.

WITH THE HORSES.

The big, clumsy horse is the fellow that suffers from the heat most as a general rule.

If a colt has not style enough naturally to hold his head high, high mangers will not make him do it.

A horse's usefulness is measured by its strength and rapidity of movement rather than by size and weight.

If you have a horse which the woman and children can drive safely, think twice before you sell it.

In breaking a colt, remember that it is an easy matter to overload and ruin him by causing him to balk.

Sprained tendons and joints are often the effect of long-grown hoofs continually stamping on solid floors.

Study to feed a balanced ration. Do not overlook the mineral value of each feed, especially for young stock.

The well-bred draft horse is always in demand, and the farmer that breeds it constantly is the one that makes the most profit in horses.

The patient mule is not much for speed, but he keeps going and usually arrives on time.

A mule never seems to be really frightened at anything. When he runs away he does it through pure love of mischief.

Weed Seeds In Silage Killed.

That the seeds of the common field weeds when silaged with corn, peas or any other forage used as silage will not retain sufficient vitality to germinate in the spring when returned to the land mixed with manure is the belief of experiment station men. While there are not experiments on record with regard to the combined chemical action of silage and manure on the germination of seeds, it is quite likely that there is little danger of seeding valuable fields with noxious weeds in this manner.

Syrup-Fed Horses Go East.

A sample of the results gained from the new system of corn-and-syrup-feeding now practiced in the west appeared last week, some few loads from Nebraska being stopped at Chicago and eleven more going on to Eastern points. Figures show that on a mixture of chaffed alfalfa, beet-sugar-house syrup and corn, big-boned horses can be coaxed to gain between 4 and 5 pounds a day for 100 days or more. The mess

is kept in the troughs before the horses all the time and they eat all they want. In addition they get alfalfa hay in racks. In appearance the horses were all that could be desired, no such glossy skins ever having been seen on this market. On this feed fat can be loaded on horses until it sticks out in lumps. One pair fed 101 days, weighed 2,100 pounds when yarded and 2,880 when loaded out. When yarded they cost \$180, ate \$62 worth of feed and sold for \$367.50.

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