FEEDLOT HOSPITAL MANAGEMENT

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The concepts of preventive medicine as studied and practiced by most in our profession do not apply in feedlots. A better term for what most feedlot veterinarians practice might be "Disease Management." Prevention defines activities that if taken avoid the occurrence of a problem. While both disease prevention and disease management define activities that are coordinated to a achieve a goal. Management readily recognizes the occurrence of problems and plans activities to deal with these to minimize their detrimental effects. Disease management plans for the occurrence of disease. The basis for success is having planned so well for dealing with disease that the goal of the feedlot is achieved.

RELATIONSHIP OF CONCEPTS

There are many seasonal activities in agriculture, such as planting, calving, weaning and harvesting that must be dealt with on a timely basis. In feedlots, storage of commodities and dealing with sick cattle share many of the same qualities. If a consulting veterinarian can help feedlot management understand the similarities so they will deal with sick cattle in the same way they deal with storage of commodities, many health management frustrations can be avoided.

PLANNING

Disease management planning requires a veterinarian understand all of the feedlots objectives and activities. Feedlot managers have dozens of activities to deal with daily. The amount of time required to deal with sick cattle varies because of the cattle life cycle. Disease management planning by the veterinarian and the feedlot must consider the effects of the cattle life cycle on the activities of the feedlot and the stage in the cycle of the cattle the feedlot intends to acquire.

Facilities

The hospital facilities should provide sick cattle the opportunity to rest, eat, and be medicated with ease. To accomplish this goal the following criteria are important.

Accommodate the expected number of sick cattle
Protect sick cattle from adverse environmental conditions
Provide for ease of handling sick cattle

The best estimate of expected morbidity will come from the feedlot records of past cattle received. The most important factors that influence the expected number of sick cattle are the number of cattle the feedlot plans to receive, the expected changes in the weather, the age of the cattle received, the time of the year received and the pre-receiving background of the cattle. Typically, the highest morbidity will occur in cattle six to eight months of age received in the fall of the year, while the lowest will occur in cattle over 12 months of age received in the spring.

Hospital facilities should be located to minimize the distance a sick animal must travel from its original pen. Having several hospital facilities in most feedlots will accomplish this goal and minimize the amount of sorting required for recovered cattle.

Hospital pens should be designed to provide at least 16 square meters (150 sq ft) of dry space per sick animal. If used, bedding should not be consumable. Bunks should provide at least 40 cm (16 inches) of linear space per sick animal. All feed should be fed in the bunk. Waterers should provide, 10 cm (4 inches) of linear space per sick animal. Waterer design must provide for easy, rapid and non-mess cleaning. Typical fall receiving conditions would demand 4800 square meters (45,000 sq feet) of dry space, 120 linear meters (400 feet) of bunk, and 30 linear meters (100) of watering space per 1000 animals received. If this space is not available, plan to use the pens adjacent to the allotted hospital area during peak morbidity.

Temperature fluctuations greater than 16 degrees celsius per day are very stressful to cattle. Loss of hair coat insulation through dampness magnifies the effect. Hospital pens should provide protection to sick cattle from both dampness and severe temperature fluctuations. Windbreaks provide wonderful relief from cold winter winds but can create air movement problems when the weather is warm. Design windbreaks to meet both conditions. If over head shelter can be provided it should be designed to allow air movement, protection from radiant heat, and allow for drying under the shelter by permitting sun light to contact all of the covered surface during the day. Over head shelters should be at least three meters high and provide two square meters of covered area per animal.

Hospital pens should hold only the number of cattle you can easily handle as a group and put through a chute in 30 minutes when medicating. The shape of the pen and gate placement should allow for ease of observation and sorting of the sick cattle. The placement of the pen should allow for cattle to be removed, treated and returned to their pen efficiently.

Treatment facilities with half circle crowding tubs, and chute feeder lanes that hold only four animals before reaching the treatment chute are best. A radius of three meters between the treatment chute and the crowding tub seems to work best. Shadows across animal runways should be an important consideration in design. All medications should be protected from the environment. Design of treatment facilities must consider the need to sort cattle as they leave the treatment chute.

Supplies

Having enough supplies in inventory to properly medicate 30 percent of the cattle that have been received in the previous 21 days is usually adequate. Inventory control is not difficult if it is properly planned.

Personnel

Trained people, with time to do their job, is an important key to success in disease management of feedlot cattle. Most feedlots can successfully care for 1000 animals per employee. However handling cattle at a single working location, regardless of how few animals are involved, will typically require two people. With so few people involved in the care of cattle in a feedlot, it is important for a feedlot veterinarian to be a team builder. Therefore it is inappropriate to single out publicly an employee for either good or bad performance. Regular monthly training meetings with all employees who directly work with the cattle is useful to foster team building, and help the employees prepare for future expected health problems in the feedlot cattle.

Help the feedlot manager understand the importance of consistent timely observation for symptoms of illness and for treatment of sick cattle. Observations should be taken at least three times a day. Ask the employees responsible for cattle health to walk or ride through pens and sort sick cattle away for treatment at least once a day. In addition ask them to drive by all cattle with less than 30 days on feed three times a day. Observing sick cattle should follow the same schedule.

Records

Each treated animal must be individually identified. A record must be kept of its treatments, dates the treatments were given and symptoms.

Treatment protocols

A feedlot veterinarian should develop treatment plans for each common disease condition or injury typically encountered. The plan must be in writing. It should include common symptoms and criteria for diagnosis of a condition, the medications or procedures to be used, instructions for follow up therapy, and withdrawal times. Therapy should be kept simple, needles should be kept small and medications must be kept out of the rump muscles when possible. It is illegal to mix your own drugs.

Recovery pens

Animals should have three to five days to recover before being returned to their original pen. Recovery pens should provide 25 square meters (250 sq ft) of surface area, 30 cm (12 inches) of linear bunk and 8 cm (3 inches) of linear watering space. Recovery pens should be monitored following the same schedule as hospital pens. Three to five recovery pens per hospital will minimize the stress of sorting on recovered cattle. Returning recovered cattle to their original pen must be a daily activity.

GETTING THE JOB DONE

All animals should be handled very carefully. Sick cattle should be sorted from healthy cattle before 11:00 AM every day. Each group should be looked at the same time each day. Holding areas for sick cattle should provide environmental protection while they are waiting to be treated. Before treatment, an employee who has received training in dealing with sick cattle should observe and score the degree of severity of each sick animal that has been removed for treatment. A scoring system from one to five has proven useful, in which one is very mild illness and five is very severe. Scoring should be done prior to placing the animal in a chute or taking its temperature. When animals reach the treatment chute confirmation of the proper diagnosis should be made, the animals temperature recorded, and the proper therapy administered as outlined in the treatment protocol. All subsequent observations, scoring and therapies should be administered early every morning.

An animals temperature should not be the sole guide to therapeutic response. Excited animals, animals treated when environmental temperatures are high, and animals that have stood in crowding areas will all have temperatures elevated above that warranted for the existing condition.

When you are visiting a feedlot, spend much of your time observing employees doing their job rather than helping them do their job. Do not over look anyone, every job on the feedlot is important.

Sanitation is very important. Employees need to understand pathogen transfer, not only for the animals well being, but for their own safety. All equipment and areas in the hospital facility must be cleaned regularly.

All animals should be necropsied. If you can not be present to necropsy animals, train a helper on the feedlot to help you gather observations from dead animals. A helper using a good instant camera can photograph lesions for you.