A Sorting Corral System for Livestock Production or Research

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Handling and sorting livestock into several groups is a frequent chore in both ranching and research. Ideally the job should be done with a minimum of labor and time, and a minimum risk of injury to livestock and humans. Livestock should be directed to the proper location by inanimate barriers, not by a cowboy or cowgirl (cowperson?) waving arms and hollering. Finally, the sorter should be able to determine which location each animal should be sent to, without relying on directions signalled or shouted across a noisy corral.

We had these objectives in mind when we designed a corral system for a grazing systems and stocking rates study at the High Plains Grasslands Research Station at Cheyenne, Wyoming. The study included 7 treatments, each replicated twice for a total of 14 lots of cattle. We planned to weigh all lots every 2 weeks, after holding them in the corral overnight, and in addition would need to apply insecticides, check for insects, and collect other data at other times. We needed a system which would allow us to handle all these operations smoothly and efficiently.

The result is shown in the plan, and it works like this. The night before weighing, all the steers in the 7 pastures of replication 1, on the north side of the lane, are brought down the lane, through holding pen B, across the crowding alley, and into holding pen A. With rep 1 in place, the cattle of rep 2 are moved into the lane and into pen B. In the morning, rep 1 goes into the crowding alley (the gates at the upper end of the alley swing both ways) and through the scales. Cattle of each treatment have a different colored ear tag, and tags of corresponding colors are attached to the gates of treatment pens 1 through 7. The sorter, who stands in the sorting alley beyond the scales, checks the ear tag color, swings the proper gate open and across the alley, and stands behind it while the steer moves into the pen. Gates have a chain latch which is hooked to a spike in the gate post for temporary closure during sorting, or is wrapped around the post and secured for more permanent closure. When rep 1 is finished, cattle for each treatment pen are moved through pen 7 into the lane to the pastures and then to the appropriate pasture; pasture gates (not shown) are also tagged with the treatment colors. Then rep 2 is handled.

Fences are constructed of pine poles 3-4 inches in diameter and 16 feet long, spiked to creosoted posts 8 feet apart. The posts are 6-8 inches in diameter and 8 feet long, set into the ground 3 feet. Fences are 4 or 5 poles high. Gates are welded steel tube construction, with the tubes square in cross-section and 1.5 inches on a side. Treatment pen 7 was made rectangular with a 16-foot gate at each end to make it easier to move in scales, calf table, squeeze chute, or other equipment to the working area under the shed. The shed is pole and frame, covered on the back and roof with galvanized steel siding.

Other construction materials and modifications of the layout would work as well. For example, more holding or treatment pens could be added. The heart of the system is the sorting alley with pens radiating out from it. The radial layout keeps the gates close together and minimizes the distance the sorter must cover. The rectangular sorting alley, with gates which swing completely across it, forces cattle into the proper pen.

The system is on the south side of a ridge, just below the crest, to provide some protection from prevailing winds. The corral sometimes fill with snow in winter, but this has not been a problem because they are used only in the summer.

The system has worked well for us. One person to force cattle through the crowding alley and one to sort in the sorting alley are needed in addition to the crew at the scale, squeeze chute, or other working equipment. In a pinch one person can weigh, record, and sort, but must cover a lot of ground.

Editor’s Note: Further information regarding designs, construction, etc. can be obtained from the author.

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