

## Low Cost Crowd Gate Works Well

Can a dairy producer install an effective crowd gate for \$50?

If you ask producers Dale and Dee Gaul, Peosta, the answer is yes. Dale and Dee took the advice from ISU Extension in designing a very simple crowd gate that is "working very well" they remarked.

The concept starts with a 2 inch PVC pipe that is 2 feet narrower than the width of the holding area. Step 2 is setting two eyebolts in the PVC pipe about 1/3 of the distance from each end.

Step 3 takes two screw-in insulators installed in the front of holding area and two in the back with the exact same spacings as the eyebolts in the PVC pipe. They should be just under any rafter/obstruction.

Step 4 uses high tensile wire, with a wire tightener on each. Tie to insulator in back, thread through eyebolt and tie to insulator in front. Then tighten wire. Repeat on the other side. The PVC pipe is now hung on the high tensile wire and able to move back and forth on the eyebolts.

Step 5 begins by finding the center of the PVC pipe. Measure a distance four feet from the center in both directions and drill a hole. Connect a strong rope or wire cable through both holes which are then tied to become a triangle so the gate can be evenly pulled. This is connected to the pull rope.

Step 6 involves drilling two small holes in the wall between the parlor and holding area to and threading the cable or pull rope through one hole. Then thread it through a pulley attached to a post in the parlor (keep it level). The pulley then allows it to come down at a right angle, thread through another small pulley attached with a spring in a convenient location from which it can be easily pulled vertically. After threading through the bottom pulley it then goes back to the ceiling to be threaded through another small pulley before taking a right angle and returning through the second hole drilled in the wall. The cable then runs the full length of the holding area to the back wall center where it is threaded through another pulley and finally returns back to be attached to the center of the PVC pipe.

Step 7 may be more easily done before the PVC is mounted on the high tensile wire. It involves connecting lightweight chains at 18" spacings to the PVC pipe so they hang about 3 feet from the ground. A wire connects each of the chains. Then a connection is made to the two eye bolts and a cow trainer is connected to one of the high tensile wires which in effect electrifies the chains. It is important to connect the chains higher than any cow can reach. Thus, cows going through chains cannot break the gate itself.

If wire cable is used it is a good idea to have the plastic/rubber encased for any stray electricity caused by a chain contacting the pull rope. Strong wire clothes line could be used. Also, due to stray voltage concerns, ground the cow trainer/fencer away from the milking facilities.

Many producers have holding areas in NE Iowa that have turns in them. The above crowd gate described can be designed in multiple sections to pull in different directions.

