## Guide to

## Inexpensive A.I. Facilities <br> by Ken Hartzell, Midwest Breeders Cooperative, Beef Breeding Manager

When visiting about artificial insemination with cattle growers who are not A.I. users, the topic of facilities usually comes up. Most people feel they don't have adequate facilities for A.I. and don't want to invest large sums of money in them. Facilities do not need to be elaborate or expensive, just adequate to get the job done with the fewest problems and greatest safety.
A.I. facilities can be used for other purposes, such as vaccinating, castrating, dehorning, etc. When planning facilities, it is helpful if these questions are answered before the system is laid out.

When starting on facilities, you must look at existing buildings, fences and pasture layouts. But all facilities for handling and A.l.ing cattle have some things in common:

1. Restraining Area. A chute, fences or gates designed to keep the animal from moving forward, backward and side-to-side. May or may not include a headgate.
2. Palpation Cage. This is a luxury but does make it easier to get behind the animal for insemination, and, if designed right, can be used to keep other animals out of the restraining area.
3. Alley. This is a narrow holding area designed to hold additional animals waiting to go into the restraining area. It can also be used for vaccination by crowding animals tightly into it, then simply reaching over the top for injections into the hip. In some cases an alley would not be necessary.

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4. Dropgate or Bar. This gate or bar is used in the alley to keep animals from backing out. A bar is used in the restraining area when a headgate is not. This prohibits the animal from backing up, but still allows the inseminator access to the rectum and vulva areas.
5. Crowding Gate. This swinging gate is used to guide animals into the alley or restráining area. This gate should be sufficient-
ly long to allow the animal to turn around, but allow the operator to still maintain control of the gate. This gate is a necessity for operator safety and ease of handling.

As far as location of facilities, our recommendation is to place them near the heat detection area. If they are to be used for other purposes, they will probably need to be located near existing buildings and lots. Getting cows in for heat detection is most easily accomplished by use of a feed bucket. This achieves two goals: 1) brings cows in with less hassle; and 2) adds nutrition. Both also help increase conception rates.

Lots with wooden fences make excellent places to build facilities. Wooden fences create a "blind" and will not injure animals as readily as woven or barbed wire. And by utilizing existing fences and posts, it is possible to cut down on the expense of building new facilities. Let's look at some very basic systems.

The diagrams on the next page are some very basic facilities. They should be helpful in planning new, inexpensive A.I. facilities or in updating old ones.
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## Diagram 1

Twenty head of cattle are inseminated using existing lots and buildings in this setup. Cows are brought into lot A twice a day and fed oats and corn and have access to loose salt and mineral. Cows to be bred are sorted off and driven into the building with help of crowding gate 1. The door is shut and with the help of crowding gate 2 , the animal is headed into the restraining area ( $R$ ). Once in the restraining area, a bar is placed behind the animal until insemination is finished. The bar is then removed and the animal backs out and is driven back into lot A. This restraining area is built out of 2 " $\times 6$ " lumber and bolted to posts on each side. This inside facility was built for less than $\$ 200$.


Diagram 3
In Diagram 3, 50 head of beef are A.I.ed. This system is purchased and portable. It uses existing buildings and lots. Cows are driven into lot A for access to water and free choice loose salt and mineral. Cows to be bred are sorted into lot $B$ through gate 1 and crowded into the alley by crowding gate 8. A drop gate 7 holds the animals in the alley $(2$ E 3) which consists of two 11 -foot commercial panels. Animals are then prodded into the chute (4) which contains an automatic headgate (5), for one-man operation. The palpation cage door (6) is locked to the inside to prohibit other animals from entering the chute. This system, containing an automatic headgate, chute, palpation cage, 4 gates and 1 dropgale costs approximately $\$ 1,500$. This system adds flexibility of being portable and can be adapted for pasture use.


Diagram 2
In this set-up, a lot was added next to the existing barn. Fences 1, 2 and 6 are built out of $2 " \times 6^{\prime \prime \prime}$ s and create an alley. 7 is a solid door that can be opened for animal release or into the vet's chute if needed. Cows are fed silage twice a day and cows to be bred are sorted and run through gate 4. Crowding gate 3 helps head the animals into the alley. Once in the restraining area (8), a bar is dropped behind the animal and the palpation door 5 is latched open to allow access and prevent inseminator injury from other animals in the alley way.

Existing Road Fence


Diagram 4
This pasture setup in Diagram 4 utilizes existing fences. Salt and mineral are fed daily in the corral along with some grain during the breeding season. The salt and mineral are fed before the breeding season to get the cattle used to coming into the corral. The salt and mineral are fed loose to minimize time spent in the corral and to assure that all cows receive the needed amounts of salt and mineral. This corral is built out of posts and cattle panels with a 2" $\times 6^{\prime \prime}$ across the top. Alley $A$ is also used to load cattle into a trailer when they are to be moved out of the pasture. This corral can also be divided into two pens. Notice that all these systems utilize a crowding gate in conjunction with a corner. This allows for one person to sort and move animals. A good set of breeding facilities can also be used to make treatment of animals routine rather than a major job. Proper facilities for A.I. offer convenience with operator and animal safety.

