Layout for intensive mating

BY FRIEDRICH BERKNER

Breeding management

Today much more than in the past, careful thought is given to the design of the mating area on a breeding unit. It is obvious that we want these facilities to play their part in making sure the sow comes back into oestrus after weaning and is mated successfully, but there are other considerations such as the labour time involved and the level of hygiene that can be achieved.

Each of these points is taken into account for an intensive mating layout devised in Germany. Shown in Figure 1, it places the weaned sows in individual stalls which face towards the boar pen. Next to the boar, and therefore also between the rows of sow stalls, are group pens to hold gilts.

We make the boar run in front of the sows for heat checking and he can also circle around behind them if necessary. All the rest of the time, however, he is kept behind partitions which can be fully closed. This means his presence acts as a constant stimulus, yet he is not so continuously in direct contact with the sows that they become too familiarised to him.

Perhaps even more noteworthy is that this layout deliberately makes provision for problem sows. It takes the form of a group pen adjacent to the gilts. Animals are brought here if they are considered to need special attention. They have extra room in which to move and can stimulate each other.

Moving the problem sows is easy. We transfer them through a stall, because we have stalls where we can open both the rear gate and the front door including the trough (see Photo 1).

For the future, we will have more units designed as in Figure 2. This alternative layout does not have 2 different rooms, one each for mating/insemination and for gestation. Instead, the sows are kept as a group in a single room. They are always in the same group. The room is operated on an all-in/all-out system and is totally cleaned when emptied.

Although we use artificial insemination, there is a boar to stimulate and check for oestrus. He moves to a new room at the end of

FIGURE 1: In this breeding layout used in northern Germany, special provision is made for problem sows at the time of heat checking and mating.

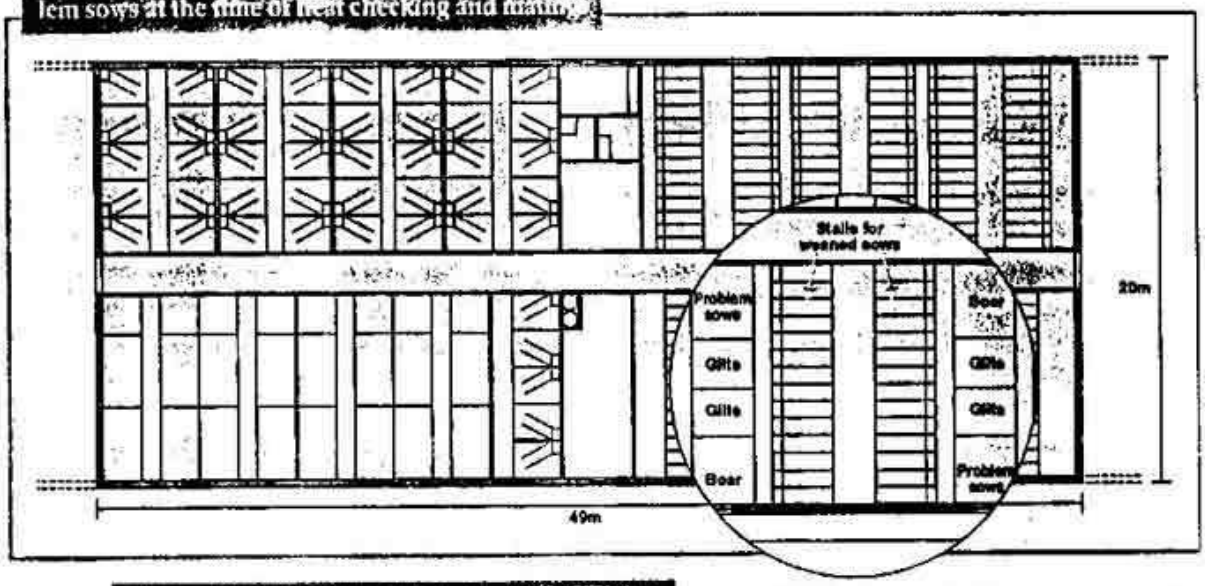
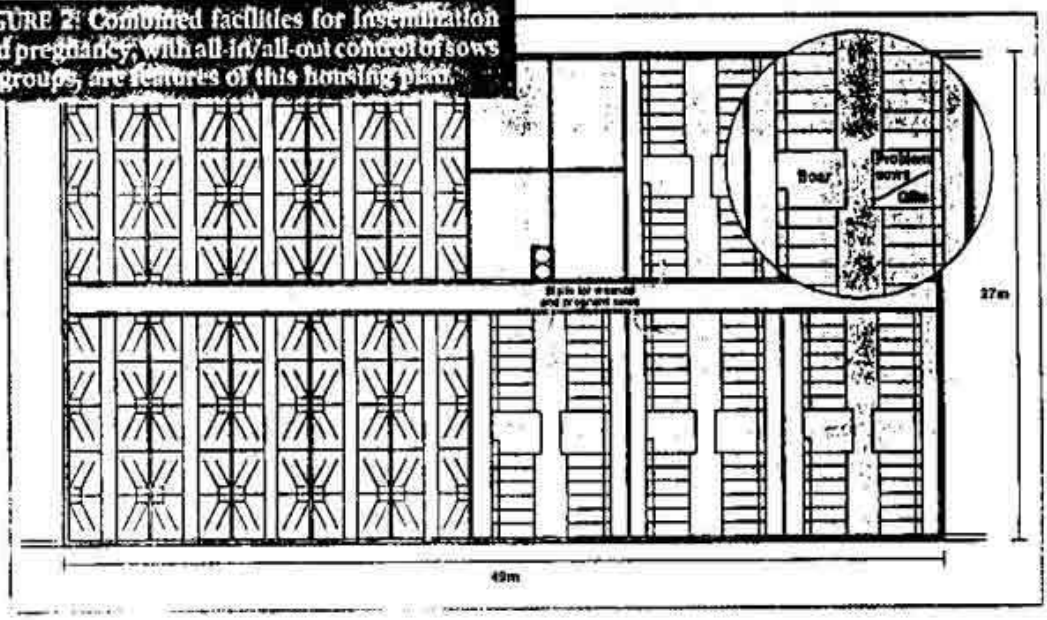


FIGURE 2: Combined facilities for insemination and pregnancy with all-in/all-out control of sows in groups, are features of this housing plan.



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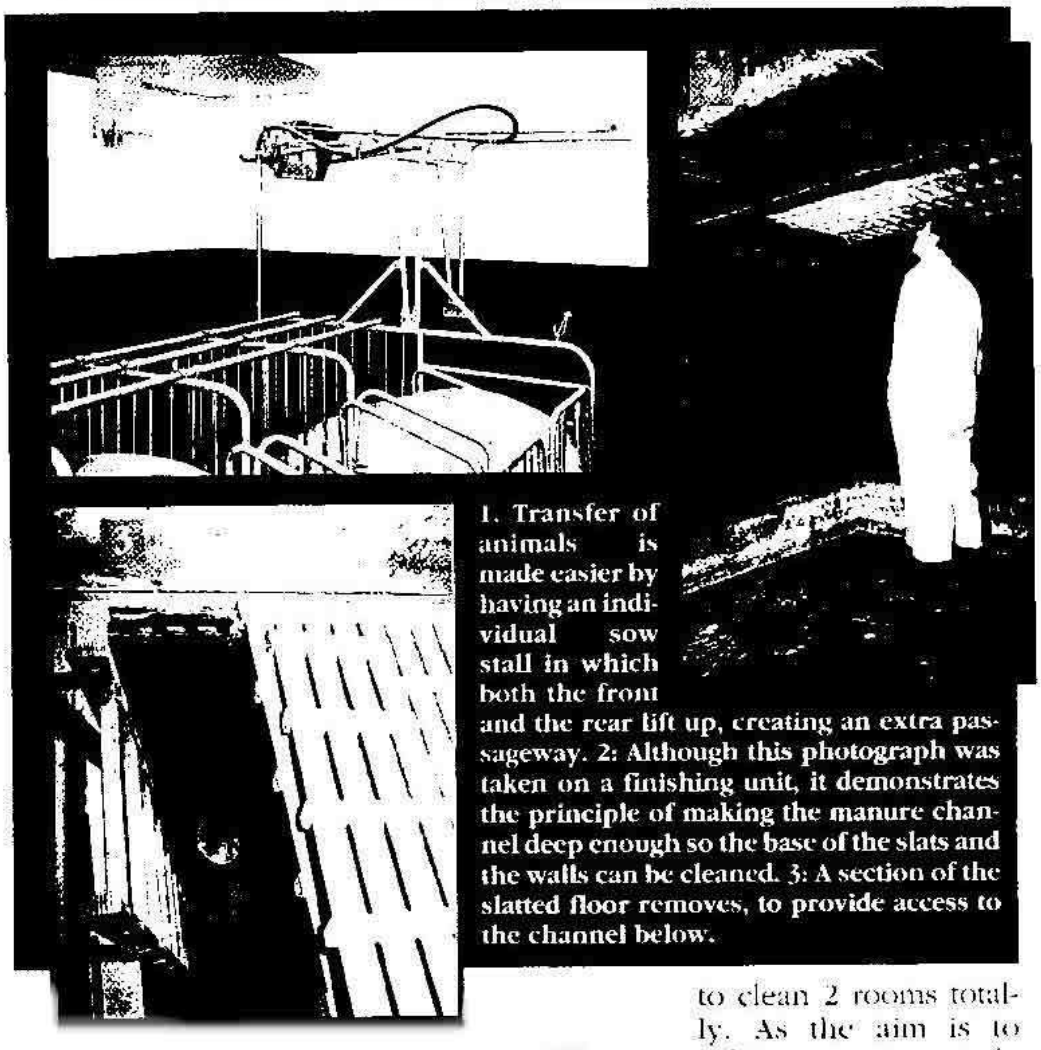
the chosen cycle. Where a 3-week cycle is adopted, for example, he is moved every third week.

Even after weaning the piglets stay in their farrowing pen, until they weigh 30kg. We know that farms which work with the system achieve this weight after the 11th week — some of them, even earlier — or nearly 7-8 days faster than with conventional 2-phase weaning. They save costs on labour as well as feed and energy use. After all, there is only one room to be cleaned and also the sows are moved just once in each cycle.

The total saving has been calculated at DM0.90 per piglet per day. It offers an amortisation period of under 4 years for the higher equipment costs of the farrowing pen when compared to a nursery pen holding the weaned pigs.

Using the 3-week cycle we have each third week in which to clean 2 rooms totally. As the aim is to achieve an extremely high level of hygiene, it is important to be able to reach the walls of the manure channel and especially the under face of the slatted floor during the cleaning process (see Photos 2 and 3). Therefore the channels are constructed to be at least 150cm deep.



1. Transfer of animals is made easier by having an individual sow stall in which both the front and the rear lift up, creating an extra passageway. 2: Although this photograph was taken on a finishing unit, it demonstrates the principle of making the manure channel deep enough so the base of the slats and the walls can be cleaned. 3: A section of the slatted floor removes, to provide access to the channel below.