Reproductive performance of a herd boar depends upon proper care and management. Boars are frequently neglected, especially newly purchased boars en route and after they are brought home. There are essential steps in the care and management of a herd boar that will help eliminate sources of trouble and give you maximum service.

**Care in transporting the boar**

Take extra care in transporting the boar to minimize sickness and injuries. Even with good management and care, he should not be used until after a minimum 30-day isolation period. The following points should be observed with all breeding herd replacements:

- Have adequate loading and unloading facilities.
- Be sure the truck has been cleaned and disinfected.
- Provide suitable bedding (straw, sawdust, sand, etc.).
- Provide protection against wind, extreme cold, rain, snow or heat.
- Do not haul boars that are unfamiliar with each other together or feed heavily before hauling, especially in hot weather.
- Isolate the boar when you get him home.

**Shelter and exercise**

The new boar should have comfortable quarters, isolated from all other animals and free of drainage from other lots. The following steps should be taken:

- Clean and disinfect quarters a few weeks prior to bringing the new boar home.
- Do not put boars that are unfamiliar with each other together.
- Provide 15-20 square feet of dry, draft-free, well-ventilated sleeping area.
- Be sure that quarters give protection from extreme weather conditions.
- Do not place the boar adjacent to a pen of gilts. He may sleep outside next to the fence, which could result in respiratory problems.
- Furnish ample shade; if no natural shade is available, provide at least 30 square feet of artificial shade.
- Supply plenty of exercise area — 1/4 acre or more; preferably legume pasture. Outdoor exercise throughout the year is one of the first essentials in keeping the boar virile and in thrifty condition.
- Set up separate feeding and bedding areas to encourage exercise. A barrow slightly smaller than the boar can be placed with him. This usually encourages exercise and furnishes competition at feeding time, encouraging the boar to start eating.
- In a confinement operation, isolate the newly purchased boar away from the herd for a minimum of 30 days and re-test.
Feeding to grow and/or maintain the herd boar

Few practical farm rations are deficient enough in any nutrient to interfere with a boar's reproductive function. However, a boar may become permanently or temporarily sterile if a ration that is deficient in quantity or balance of nutrients is fed over a long period of time.

The tendency is for most breeders to overfeed a boar. This is a wasteful practice that results in overfinish, decreased libido and sluggishness.

The new boar should be fed 4 to 5 pounds of balanced 14 percent ration or 4 to 5 pounds of grain and 1/2 pound of a 35 percent protein supplement. If he is over or under condition during breeding season, this amount may need to be changed to maintain thriftiness and vigor. Young boars in breeding condition usually grow well on 6 pounds of feed during the first breeding season and can be maintained adequately on 4 pounds of feed when not in service.

Health check and care

Most health problems can be controlled by buying boars from herds that are apparently free of disease and parasites. This can usually be determined by careful examination of the herd and premises before buying a boar.

After you get the boar home, isolate him as long as practical — 8 to 10 weeks is best. Your veterinarian is the key to maintaining a healthy boar and herd, and he or she should be consulted and used as needed.

The following are health recommendation for buyers:

- Before buying a boar, require a negative test for brucellosis and vaccination for leptospirosis.
- Be sure the boar has been vaccinated for erysipelas.
- Treat for internal and external parasites if owner has not done so recently.
- Watch the boar closely during the isolation period for signs of illness, sluggishness or coughing. Check his temperature; if it is over 103 degrees, call your veterinarian.
- Get a blood test for brucellosis and leptospirosis three or four weeks after you get him home. This is a precautionary measure to be sure he has not contracted one of these diseases immediately prior to purchase or en route to your farm. Have your veterinarian check him over carefully while he is in isolation.
- If the boar becomes ill and has an extremely high temperature, do not use him for 8 to 10 weeks after the fever has subsided.
- To maintain and keep a vigorous, healthy herd boar, be sure that the sanitation and health program is the best that can be provided.
- Remove all antibiotics from the ration three weeks after arrival for one month before breeding to see if a disease is being suppressed.
- Rotate the new boar to sow lot three weeks to one month prior to breeding and three weeks after isolation. Expose the new boar to health conditions in your herd before breeding by allowing him to run with bred sows or in lots used by sows to be bred to him.

Management is important

Proper feeding and management are necessary before and during the breeding season. This includes feeding, housing, health and service capacity. When good management practices are not followed, the performance that you get from a boar is often disappointing.
The boar should be conditioned by increasing his ration to 6 pounds, six to eight weeks prior to the breeding season.

You should make a fertility check at least 30 days before you start using the boar. One of the best ways is to hand mate him to five or six healthy virgin gilts that are scheduled for slaughter. If more than one-third of these gilts return to heat within 28 days after mating, the fertility of the boar might be questionable. He should be examined by someone who is properly trained in the evaluation of boars. The evaluation should include:

- Examination of the anatomy and development of the reproductive organs.
- A check on ability to produce a normal erection followed by a normal extension of the penis and performance of a satisfactory service.
- Examination of the semen for motility, concentration, and morphological and anatomical defects.

When the temperature exceeds 80 degrees, hand mating should be done early in the morning and/or late in the evening. The boar should be fed once a day, preferably after usage.

The sow should be bred at least twice during the heat period, preferably the last of the first day and early in the second day. Research has shown that two services increase conception by 30 percent on the first heat and increase litter size by one pig.

The normal breeding load for boars is difficult to determine because of the variation in libido, aggressiveness and ability of individual boars. The foregoing recommendations are averages based on research and practical observation and should be used only as a guide. Maintain one boar for each two sows weaned on a given day, or stagger weaning in multiple farrowing units to get maximum fertility and grouped farrowing.

<table>
<thead>
<tr>
<th>Age in months</th>
<th>Pasture mating</th>
<th>Hand mating</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 or less</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>7 to 9</td>
<td>6 to 8 in 21 days</td>
<td>10 to 15 in 21 days</td>
</tr>
<tr>
<td>9 to 12</td>
<td>8 to 10 in 21 days</td>
<td>15 to 20 in 21 days</td>
</tr>
<tr>
<td>12 to 18</td>
<td>10 to 12 in 21 days</td>
<td>20 to 25 in 21 days</td>
</tr>
<tr>
<td>18 or over</td>
<td>12 to 15 in 21 days</td>
<td>25 to 30 in 21 days</td>
</tr>
</tbody>
</table>

**Breeding procedure**

Hand mating is a more common practice with swine than with cattle or sheep. In fact, it is almost the universal procedure in purebred swine herds, and some commercial producers follow the same practice.

When a mature, heavy boar is to be bred to gilts or when a boar pig is to be bred to big, rangy sows, the use of a breeding crate is recommended. Animals that have been breeding naturally may refuse service with a crate or may breed with reluctance. If a breeding crate is not available, two bales of hay placed one on either side of a gilt may serve as a satisfactory substitute.

Where field mating is practiced with commercial herds, two methods are recommended:

- Divide the herd and have one boar per group
- Alternate boars in the herd; that is, use one boar or set of boars one day and another boar or set of...
boars the next day.

During summer months, you can get best conception rates by allowing the boars in breeding pens from sundown to sunup and out during the day.

**Handling boars before and after breeding season**

The practice is to run only boars of the same age and size together between breeding seasons, provided they are placed together at a young age and their tusks are kept clipped. Older boars should have their tusks removed each year before the breeding season, or as needed. Bolt cutters, hoof trimmers, or a hack saw are instruments suitable for doing this job. Keeping tusks trimmed may prevent serious injury to the herdsman. It is not unusual for grown boars to become irritable and attack when the opportunity arises.

Patience and good judgment should be exercised in handling the breeding animals, for rough treatment may cause old boars to become vicious or young boars to become so timid that they will not mate readily when needed.

**G2503, reviewed June 1995**

**Related MU Extension publications**

- G2310, Rotational Crossbreeding Systems for Pork Producers
- G2311, Terminal and Rotational Crossbreeding Systems for Pork Producers
- G2502, Purchasing a Herd Boar for Commercial Swine Production

Order publications online at http://extension.missouri.edu/explore/shop/ or call toll-free 800-292-0969.