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Boar Fertility

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When boars are relied on for mating, fertility is paramount. Boar fertility should be checked periodically. This is done by collecting an ejaculate and examining it under a microscope. Boar semen should be milky white, not pink or yellow. Sperm should swirl under the microscope with minimal broken tails or dead sperm.

Boar fertility is reduced because of overuse and high temperatures. For optimum levels of sperm per mating, boars should be mated no more than 1 to 2 times daily or 5 to 7 times per week. In pen mating settings, a young boar is needed for every 2 to 4 sows, and an older boar is needed for every 3 to 5 sows for a 7-10 day breeding period. Some producers rotate boars, which allows each boar time to eat and rest before resuming breeding activities. The lower value is for young boars (8-12 months old) and the upper value is for older boars (>12 months old)

Fertility is reduced markedly about 5-6 weeks after fever or hot ambient temperatures. Efforts to keep boars cool are important. Count the boar's respiration rate to see if he is suffering heat stress. Normal respiration is 25-30 breaths per minute. Respiration rates greater than 40-50 breaths per minute signal that cooling is needed immediately. During heat stress 75-100 breaths per minute are possible. Cooling efforts include shade, sprinkling and access to wet concrete flooring in the shade. Do not move, mix, or mate boars during hot weather (> 85 °F).

Boar Management Summary¹

1. Purchase boars early (at least 45-60 days before breeding). Consider purchasing boars as 50-75 pound feeder pigs.
2. Use selection criteria that match your goals.
3. New boars can bring new diseases to your herd. Buy from healthy herds.
4. Isolate the boar for at least 30 days before mating.
5. Practice-mate the new boar to gilts.
6. Check semen quality.
7. Have enough boars for your herd. This will improve conception rate and litter size.
8. Keep boars cool. Do not mix young and old boars.
9. Write down breeding dates and details.
10. Remember to vaccinate and de-worm boars on the same schedule as sows.
11. Feed boars 5-6.5 pounds of your sow lactation diet daily.

¹Adapted from PIH 08-02-02

Additional Resources

Purdue University Extension, 2007.
Relative Value of Feedstuffs for Swine,
The New Pork Industry Handbook—07-06-03. Purdue University. West Lafayette, IN.

U.S. Pork Information Gateway
<http://pork.porkgateway.org/web/guest/home>