

NSIF REPRODUCTIVE PERFORMANCE COMMITTEE REPORT

December 5-6, 1977

Holiday Inn West

St. Louis, MO

Committee members present:

B. Funderburg - OH (Chairman)	D. Lewis - NC
E. Stevermer - IA (Secretary)	R. Malan - IL
D. Brinkman - IL	L. Olson - MN
E. Dee - IA	W. Olson - KS
J. Diehl - AL	G. Parker - KY
V. Floyd - NC	D. Shoup - IN
D. Hurn - IA	D. Stevens - IA
G. Jorgensen - SD	G. Watson - KY
L. Lah - CO	T. Williams -

The committee reviewed the Reproduction Section of the Guidelines. Suggested changes to the Guidelines, which were reported in the Proceedings of the 1976 meeting, were reviewed as well as the Reproduction Section. The committee recommended the following changes:

1. Rework paragraph a on Page 24 to read as follows:
 - a. Energy needs of boars are variable; and upon completion of test, boars should be fed at a level of energy that will prevent excessive fat deposition. This practice can help to insure that boars are physically adept and sexually active. Nutrients other than energy should be provided to at least meet the minimum daily recommended allowances of the National Research Council.
2. Add a new heading above part d on Page 25 -- MANAGEMENT OF NEWLY PURCHASED BOARS.
3. Include a paragraph on transportation of newly purchased boars. The committee recommendation for this paragraph is:
 - a. Transport newly purchased boars in a well bedded, covered truck. Feed them only 3 or 4 lbs. of feed daily for the first week. Introduce them to the sow herd gradually, starting with a single gilt. If a boar doesn't make the adjustment to his new environment satisfactorily, call the breeder immediately for assistance.

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4. Combine paragraphs d and e into one paragraph as follows:
 - b. After delivery, boars should be isolated in clean, comfortable quarters for a minimum of 30 days. During this time, boars should be acclimated to the environmental conditions (dirt, confinement, fluctuating temperatures, sunlight, etc.) that they are expected to function in during breeding. After an initial adjustment period, procedures should be implemented to:
 - (1) as is.
 - (2) Maintain and/or further stimulate sexual arousal and drive. Introduction of a few subordinate market barrows or cycling market gilts should provide sexual stimulation.
 - (3) as is.
5. Change paragraph f to c.
6. On Page 26, Mounting: Change the question to: Boars must have the ability to mount correctly.
7. On Page 26, Mating: Change "frequently encountered" to "occasionally encountered."
8. On Page 26, Semen: In third line, "for" should be "from." In the fifth line, add the following after "standing heat": "After the boar begins to extend his penis, firmly grasp the corkscrew end of the penis and bring the penis gradually forward."

In the 10th line, "The volume of semen obtained from boars is quite variable but averages between 200-250 milliliters (1 cup)."
9. On Page 27, Test Matings: Third line, change "estrous" to "estrus." Eighth line, remove "at least"; insert "up to."

The committee also reviewed the 1976 Proceedings of the NSIF Annual Meeting and recommended the following changes:

1. Page 41, Improving Sow Productivity -- Minimum Program

- (4) Select for replacement at three weeks those gilts from the largest, healthiest litters in the group. Identify these gilts in some way, such as a hole in the ear. (Identify twice as many gilts as you will need for future replacements.)
 - (6) Final selection of the gilts identified at 21 days should be made at market weight. Save for replacements the soundest, best gaining, and leanest. (See Procedure for Reproductive Soundness of Gilts.)
2. Page 42, Data Collection:
- (2) Record Litter birth weight (live pigs only) as soon as possible after farrowing.
 - (3) Record farrowing ease score on a 1 to 5 scale:
 - Score 5 - Farrowed and cleaned with no outside stimulus and less than 10 percent stillborn.
 - Score 4 - Farrowed and cleaned with oxytocin injection and/or less than 20 percent stillborn.
 - Score 3 - Needed physical assistance or up to 30 percent stillborn.
 - Score 2 - Needed repeated assistance and/or more than 1/3 stillborn.
 - Score 1 - Required cesarean or died during or shortly after farrowing.
3. Page 43: Add an "s" to "time" in paragraph (1).
- Paragraph 2: The 21-day adjustment value for parity of first litter sows should be increased from 12 to 17 pounds. [This was determined based upon data from Andy Swiger (Ohio) and Lauren Christian (Iowa).]
- Paragraph 3: The 0.15 heritability factor is agreeable to both Swiger and Christian.

4. Page 44, insert below the Female Month Breeding Herd formulas the following:

Gilts are included in the monthly breeding herd inventory when they are picked for replacements at six months of age, not at the date they are bred.

- c. Procedure for Evaluating Reproductive Soundness of Gilts

Add minimum to the last sentence on Page 44 so it reads in part as follows: "...to meet the minimum daily recommended... ."

5. Onset of Puberty: Spell "estrous" as "estrus."
6. Reproductive Soundness: Insert "by visual inspection" between ...eliminated-----before breeding.
- (2) An upturned or "tipped."
- (3) Drugs and hormone treatments to initiate the onset of estrus and improve reproductive performance, particularly in seedstock producing herds, is to be discouraged.
7. Change spelling of "estrous" to "estrus" in the last paragraph on Page 45.

Submitted by,

Bill Funderburg, Chairman
Emmett Stevermer, Secretary