

Breeding Soundness Examination

by Wayne Singleton
Dept. of Animal Sciences
Purdue University

A ram not only represents a sizeable investment but he also influence the economic return from the flock for years to come. Therefore, a producer should select a ram that will both settle a high percentage of the flock early in the breeding season and sire lambs with the genetic potential for rapid and efficient growth.

Presently, there is no accurate method available that can be used to predict the lambing rate of ewes exposed to an individual ram. But through a breeding soundness examination prior to the breeding season, rams of questionable or unsatisfactory breeding potential can be identified.

Surveys show that 10 to 15% of rams examined are questionable or unsatisfactory potential breeders. A breeding soundness **examination** should be performed by a veterinarian or trained technician. Following is an outline of procedures followed in this **examination**.

BREEDING SOUNDNESS EXAMINATION

I. Structural Soundness

- A. Body condition
- B. Feet and legs
- C. Vision
- D. Other defects which may impair the ram's ability to locate and mate with ewes in heat.

II. Reproductive Soundness

A. Reproductive anatomy

- 1. Penis
- 2. Scrotum
 - a. size as measured by circumference
 - b. palpation

B. Semen Collection

- 1. electroejaculator
- 2. artificial vagina

C. Semen Evaluation

- 1. Gross evaluation
 - a. volume
 - b. color
 - c. relative sperm number
- 2. Microscopic
 - a. sperm motility
 - b. number of sperm
 - c. sperm morphology

Semen Characteristics of the Ram and other Farm Animals

	Ram	Bull	Boar	Stallion
Semen Volume (ml)	0.8-2.0	5.0-15.0	100-400	40-150
No. sperm per Ejaculate (billion)	1.5-4.0	4.0-18.0	20.0-70.0	8.0-60.0
Motility (%)	70-95	70-95	70-95	70-90
pH	5.9-7.3	6.3-6.9	7.2-7.9	7.2-7.8