SHEEP SHEET

Ram Breeding Soundness Evaluation (BSE)

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Sheepdex R-3

RAM SELECTION:

The majority of the genetic improvement in a flock or band results from proper ram selection. Selection of the ram(s) starts with establishing a set of goals and outlining the performance criteria necessary to meet those goals. Procurement of rams, especially stud rams, should be made from breeders of ram testing organizations, or participants of performance records, like the National Sheep Improvement Program (NSIP). Records are essential, including immunization status, flock health management and medical history. Fertility evaluation (testicular size and spermatozoa quality) should be part of the selection criteria. Spermatozoa output is directly related to testicular size and weight which in turn is correlated with body condition.

In ram lambs testicular growth correlates with body growth and levels off at maturity. Growth promotants have a detrimental effect on testicular development. The number and quality of spermatozoa are directly related to fecundity in the ewe. The semen should have a minimum of 30% progressively motile spermatozoa, 75% morphologically normal spermatozoa and no white blood cells (WBC).

A complete breeding soundness evaluation (BSE) includes a thorough physical and conformational examination plus a negative ELISA test for *Brucella ovis* within 30 days of purchase. Purchased animals, regardless of the source, should be isolated for an observation period of 30 days prior to introduction into the flock.

A breeding soundness evaluation (BSE) is a thorough physical examination with special emphasis on the reproductive system. Highly fertile rams improve the overall reproductive efficiency of the flock by producing more viable lambs in a shorter period of time. Assessment of the ram's fertility allows maximum utilization of his breeding potential. In most instances, even under adverse range condition, a highly fertile, physically sound ram is capable of serving 75 to 100 ewes with satisfactory results.

A BREEDING SOUNDNESS EVALUATION (BSE) CONSISTS OF:

PHYSICAL EXAMINATION

General Considerations -

- Assessment of general condition for any signs of disease or impairment.
- Examination for structural soundness.
- Feet - foot rot, bumble foot, inter-digital inflammation, or other abnormalities.
- Legs - straight, but not post-legged and strong.
- Teeth - Age, condition of teeth, dental pad.
- Jaw - 'parrot mouth', 'bull-dog mouth'.
- Gait - travel and general movement.

Fleece -

- Spinning count, grade appropriate for breed.
- Presence of colored fibers.
- Heterotype fibers (a.k.a. gare).

- Density.
- Belly wool, on locations other than belly.
- Handle.
- Character, i.e. crimp and color.
- Grease content.
- Uniformity, shoulder, side, and britch.

REPRODUCTIVE EXAMINATION

Testicles -

- The testes are palpated for any abnormalities, adhesions, lesions, tone and/or consistency, and shape.
- Scrotal circumference measured.
  Ram Lambs -
  Blackface - 150 lbs. or heavier, should have a minimum scrotal circumference of 30 cm.
  Whiteface - 150 lbs. or heavier, should have a minimum scrotal circumference of 25 cm.
  Yearling Rams (12 to 18 months) and Older -
  Blackface - Should have a minimum scrotal circumference of 33 cm.
  Whiteface - Should have a minimum scrotal circumference of 30 cm.

Prepuce and Penis -

- The prepuce is examined fro any signs of pizzle rot or ulcerative dermatosis.
- The penis is extended and examined for any adhesions, lesions of the glands, deviated (crooked/bent) or other abnormalities.
- Look for the presence of the variform appendage, to ensure it hasn't been cut off during a shearing accident.

Semen Examination -

- Semen is collected (usually by electro-ejaculation) and examined microscopically for color, spermatozoa concentration, motility (forward movement), morphology and evidence of white blood cells (WBC).
- The 'ideal' ram semen should be free of WBC's and have greater than 50% forward progressive motility. As these values drop so does the reproductive capacity.

ADDITIONIAL NOTES:

For more information write:
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