# Breeding Season Preparedness

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#### **INTRODUCTION**

#### **Terminology**





	GOATS	SHEEP	
Females	Doe	Ewe	
Males	Buck	Ram	
Castrates	Wether	Wether	
Birthing	Kidding	Lambing	
Offspring	Kid	Lamb	
Youngsters	Doe Kid /Buck kid	Ewe lamb/ Ram lamb	

#### REPRODUCTIVE FACTS

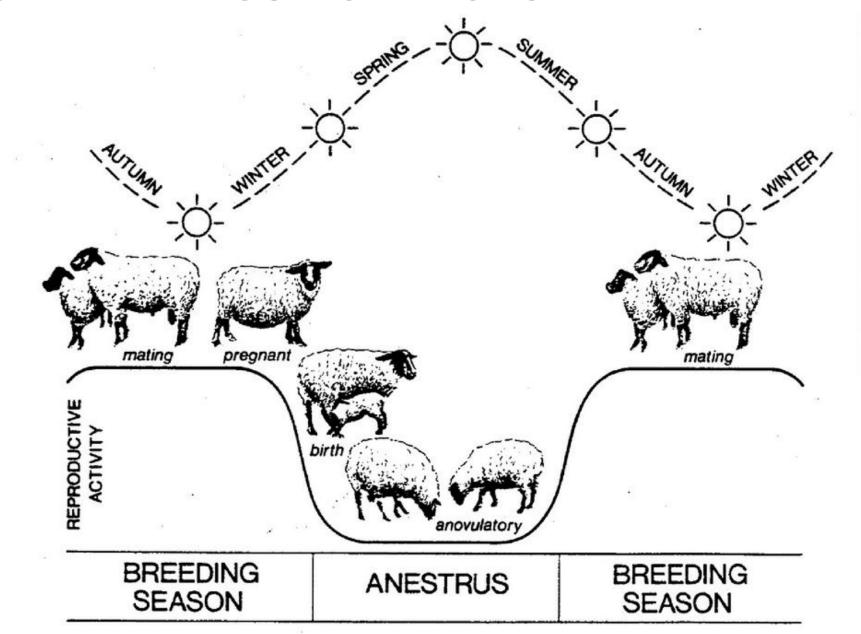




	GOATS	SHEEP
Estrous Cycle	21 days (18-22)	17 days (14-19)
Estrus/heat Length	~ 36 h	~ 30 h
Signs of heat	+/- Swelling Vulva, mucus, follows buck, tail wagging, vocal	+/- Swelling Vulva, mucus, follows ram

Polyestrous, Seasonal, Short-day breeders

#### SHEEP AND GOATS ARE SHORT DAY BREEDERS

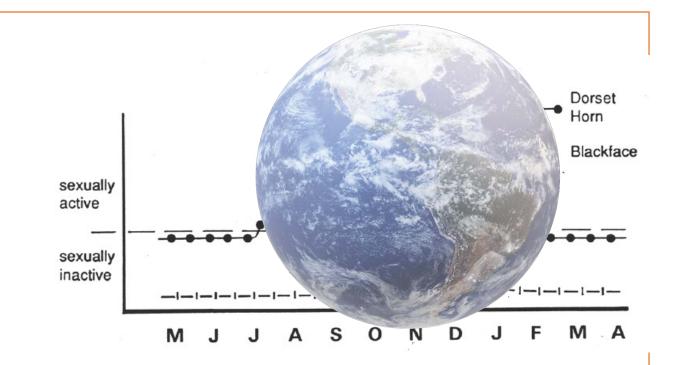


#### **BREEDING SEASON**

Definition

#### Influenced by

- Location
- Breed
- Nutrition status
- Production system





# **Small Ruminant Industry**









Creamery

**Artisanal** 





**Feedlots** 











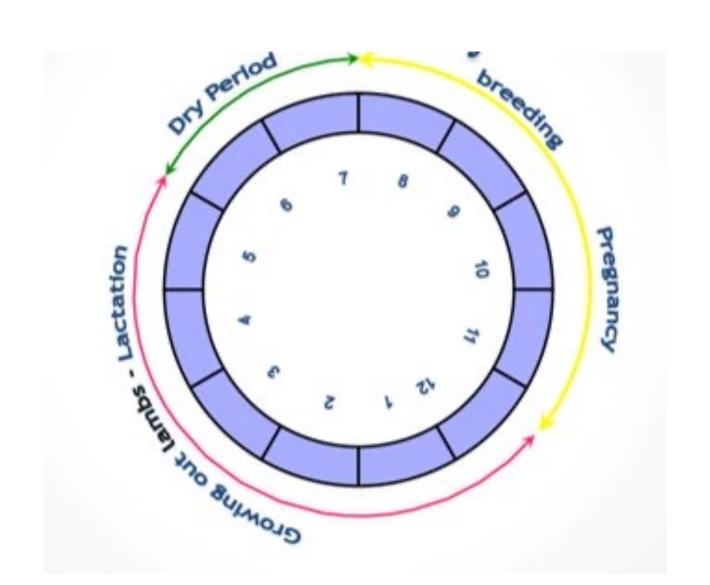


#### WHEN IS MY BREEDING SEASON?

#### **HOW LONG IS MY BREEDING SEASON?**

Prepare	Breed	Lambing	4 m old
May	July	<ul><li>December</li></ul>	- April

#### **PRODUCTION CYCLE**



#### **OPTIMAL BREEDING SEASON**

- We successfully stablish a breeding period
- All the females got pregnant
- With twins (+/-)
- With our targeted genetics
- Healthy females, males and offsprings







#### **SUCCESSFUL BREEDING SEASON**

#### Rams / Bucks

Desired genetics

Fertile

Healthy

Adequate BCS

Libido

Minimal Heat Stress

#### Ewes / Does

Vaccinated

Flushed

**Nutritionally Managed** 

Minimal Heat Stress

**Adequately Covered** 







# Rams / Bucks

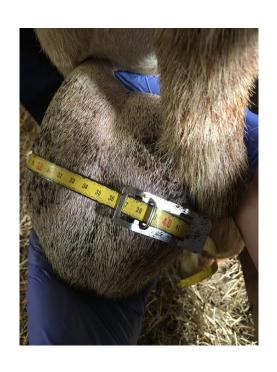
- ~ 2 months pre-breeding
- Body condition score 3-3.5 (score 1-5)
- Physical examination
- This is a good time to do a foot trim
- Shear for Testicular Cooling
- Housing Provide Shade
- Treatment, if necessary, eg Pizzle Rot
- Cull and Replace as necessary







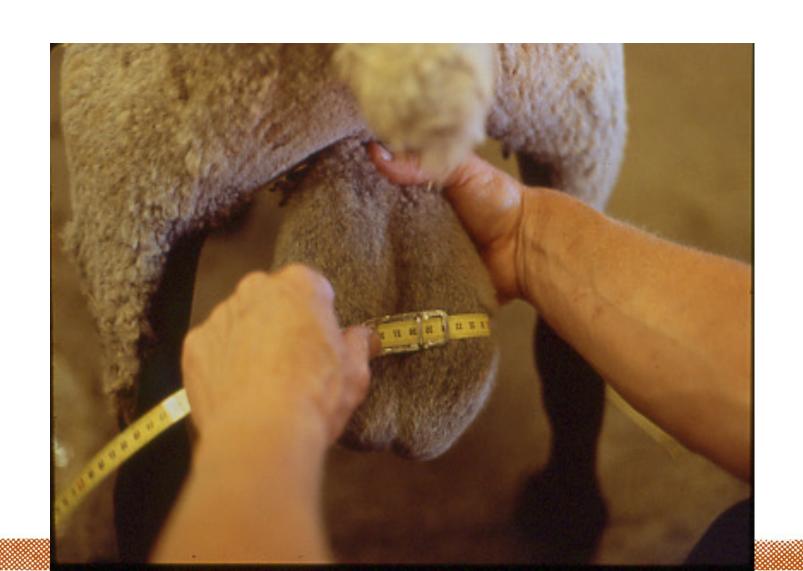
# **Breeding Soundness Evaluation (BSE)**



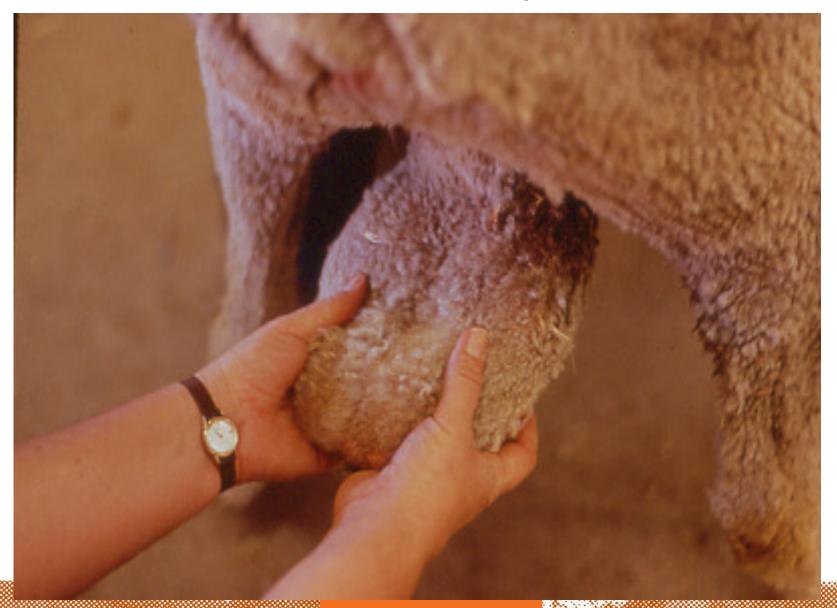




# **Scrotal Circumference**



# **Testicular Palpation**

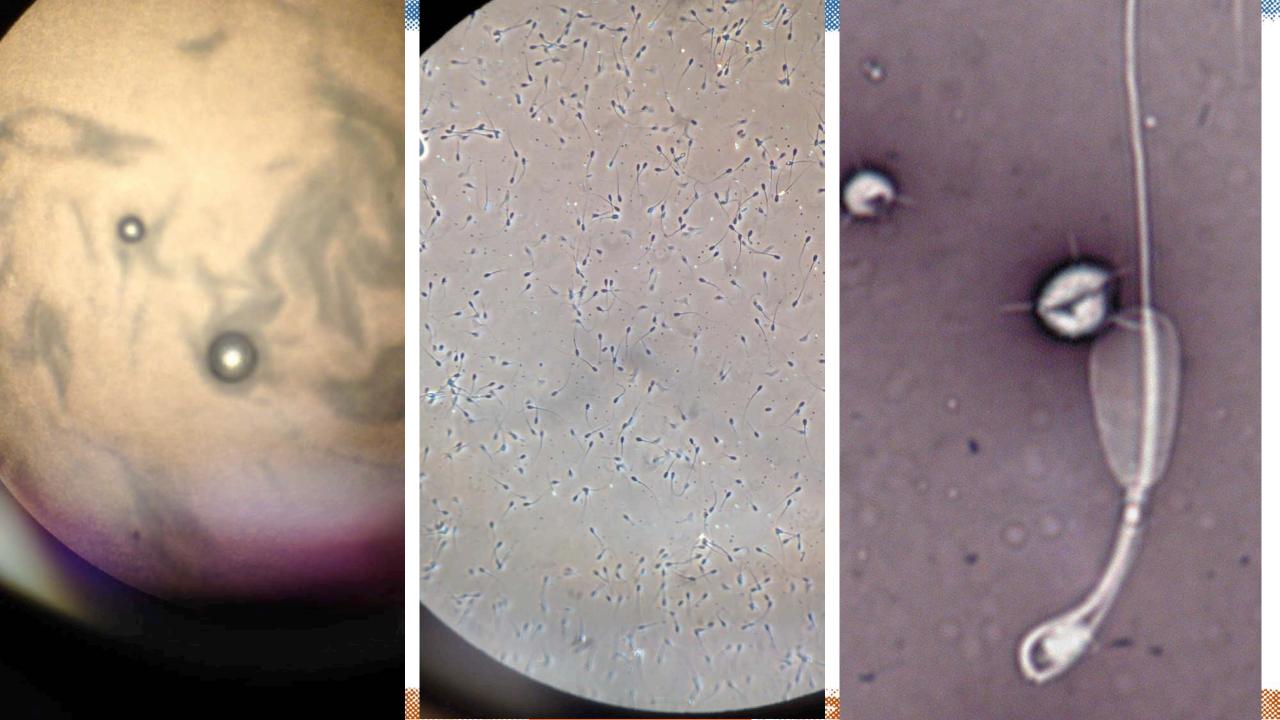






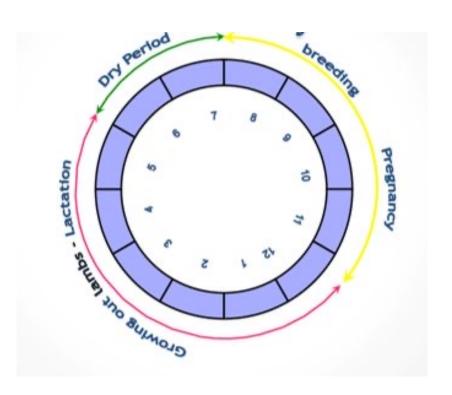






#### **SELECTING THE FEMALE HERD**

- Cull poor performers
  - Bad udders
  - Susceptible to parasites
- Select replacements
- New additions should be quarantined
- Body Condition Score
- "flushing the herd"





#### **NUTRITIONAL CONSIDERATIONS**

- Flushing 2-4 weeks prior to breeding
- High Energy Ration prior to breeding increased crop by 20%
- Possibly higher fertilization rate
- Increasing Energy
- Supplement or High-Quality Pasture





# **Heat Stress**







#### MALE POWER – HOW MANY?

Yearlings – 1:20 females

(5%)

Mature males – 1:40 females

(2.5%)

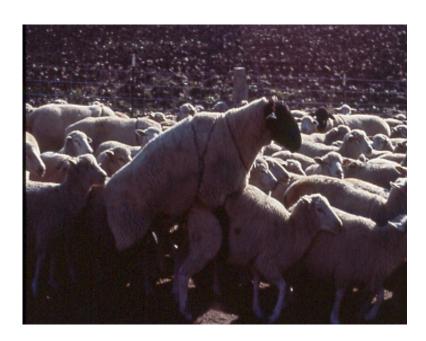
Synchronized females – 1:5-10

#### No. of Services/Heat % pregnant

1 64

2 76

3 93



# HOW TO ACCELERATE THE BREEDING SEASON

- Flushing
- Ram Effect
- Hormonal Uses
- Light treatment





# RAM/BUCK EFFECT

• Introduction of a male to Anovulatory females Induces Estrus

- Synchronizing Effect
- Induces Breeding Season 2-3 Weeks Early

Shortens Time to Puberty in females

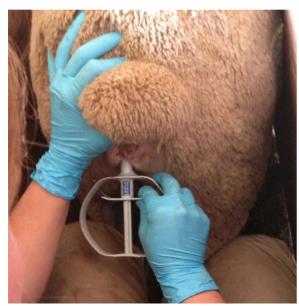






#### **HORMONAL USE**

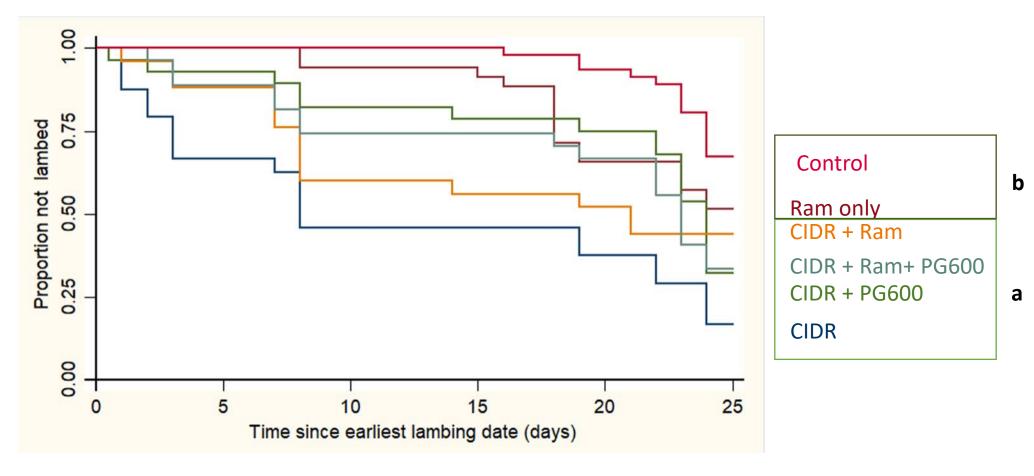








# Use of CIDRs to achieve earlier lambing dates

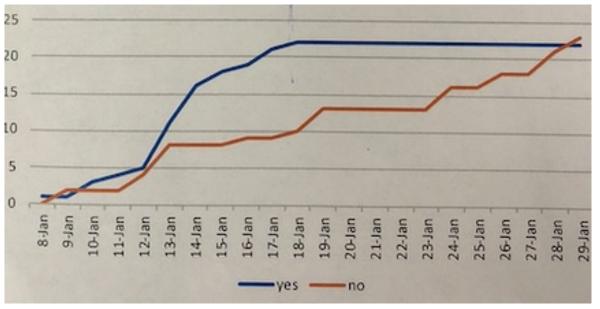


CIDR's hazard ratio: 1.62 (p=0.023)



# Use of CIDRs to achieve earlier lambing dates







# Monitoring Performance

- Each Ram Wears Marking Harness
- Chalk Colors Changed q 2 weeks
- Ewes can be Grouped
- Ram Performance Assessed
- Watch for heat
- +/- vasectomized







### **HEAT DETECTION DOES**

















#### **NOT COMING IN HEAT?**

- Pregnancy
- Seasonal Anestrus
- Cysts / pseudopregnancy
- Nutritional anestrus

- Lameness
- Environment, flooring
- Missing heats

Not cycling

Cycling



#### FACTORS AFFECTING ESTRUS BEHAVIOR

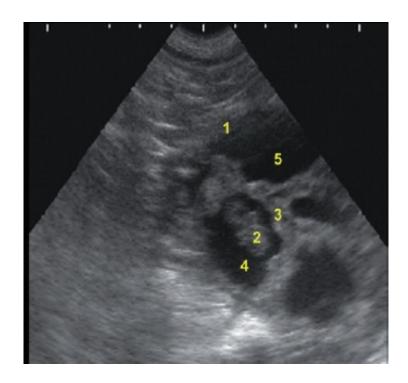
- Heat stress
- Low BCS/ negative energy balance
- Stressful handling
- Bad flooring
- Overcrowding



#### **PREGNANCY DIAGNOSIS**







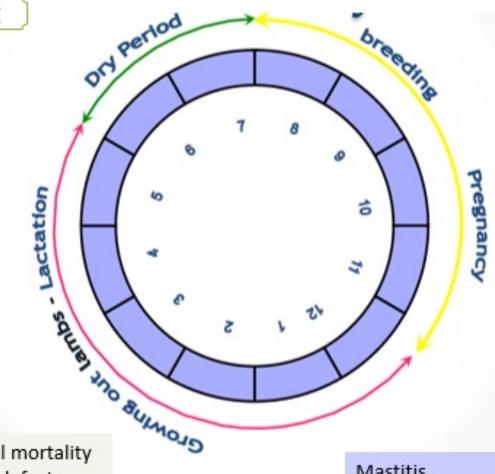


- BCS
- Epididymitis
- Feet/ legs
- Cull

- Shear
- Cull –BCS, molar wear, lameness, mastitis

Market

- Pneumonia
- Coccidiosis
- Parasites
- Nutrition
- Enterotoxemia
- Predation
- Misadventure
- Fly Strike



- · Neonatal mortality
- · Genetic defects
- Navel ill
- Enteritis

Mastitis Maternal bond Orphans/grafting

- BCS / Nutrition
- Shade
- Metabolic Dz
- Parasite control
- Vit E Se

- BCS
- Epididymitis
- Feet/ legs
- Cull
- Preg checks
- Abortion
- Prolapse
- Dystocia

#### **REMARKS**

- Evaluate what is the best breeding season for you
  - Time of the year and length
- Prepare your animals in advance for the breeding season
  - Nutrition
  - Health
  - Breeding soundness evaluation
  - Select replacements
- During the breeding season
  - Minimize heat stress
  - Have the right male power





# Thank you

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