

# Sheep Husbandry - breeding



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Newlands Farm, Darvel  
14<sup>th</sup> October 2017

# Oestrous Cycle in Ewes

- Cattle & Pigs Breed throughout the year
- Sheep/Goats/Deer are Autumn breeders (triggered by short days)
- Although...some sheep can breed all year round

# Oestrus Cycle in Ewes

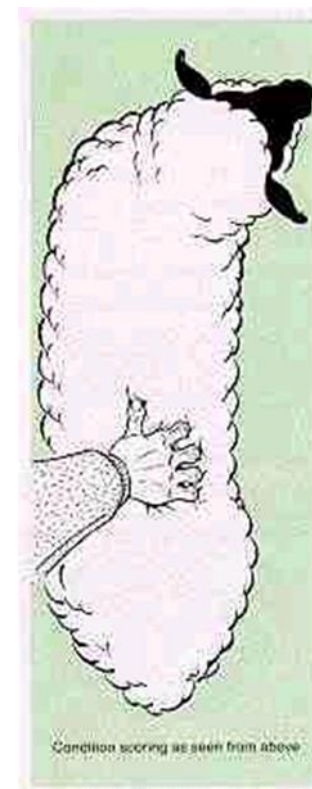
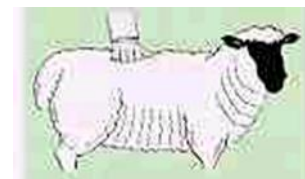
- Oestrus lasts 24 - 28 hours
- Ovulation takes place every 17 days (14 - 19days)
- Gestation length 147 days (144 – 150 days) (5 months)
  - When would you put the tup out with the ewes?
  - How long would you leave the tup with the ewes

# Pre-mating checks of ewes

- When? 6 - 8 weeks pre-tupping
- Feet - pare & treat as necessary & foot bath
- Udders - cull all with lumps (mastitis)
- Teeth - cull / cast broken mouthed ewes
- Vet & Med – Fluke, worm?, abortion/foot vax, bolus.
- Assess Condition - 8 to 1

# Body condition scoring

- Body condition is assessed by handling the ewe over and round the back bone, in the area of the loin behind the last rib.
- It is usual to score all ewes on a scale of 0-5, using half scores as intermediate points along the scale



# Condition Score of Ewes At Mating



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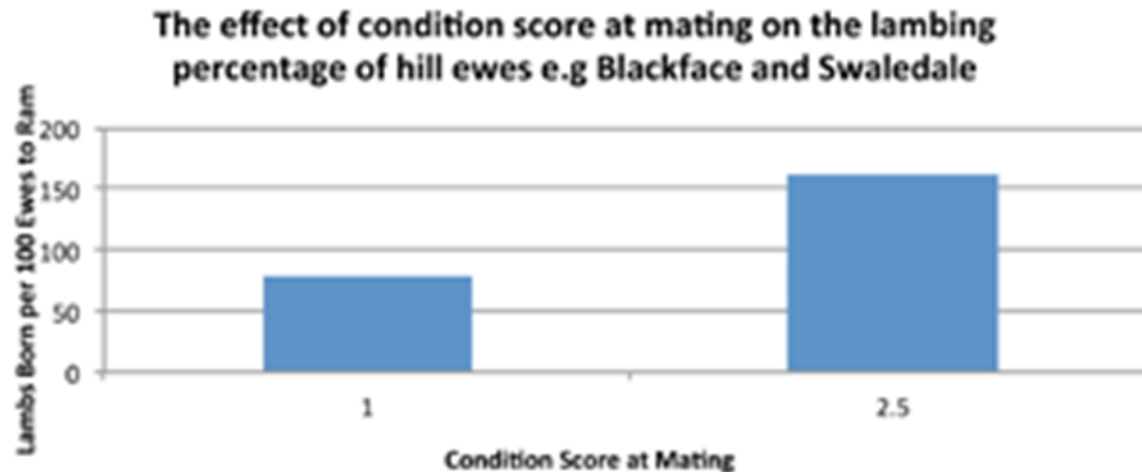
- Most important single contributing factor to achieving high lambing percentages
- Condition score 1          very thin
- Condition score 5          very fat
- $\frac{1}{4}$   $\frac{1}{2}$   $\frac{3}{4}$  scores
- Target 2.5 to 3.5 , depending on system and breed
- BCS at weaning, tupping and mid pregnancy



# Effect of Condition Score



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## Mule ewes - Body condition score at mating

	2	2½	3	3½	4
Lambing percentage	149	166	178	194	192

# Pregnancy Scanning of Ewes



- Optimum time of scanning - around 50 days after removing the tup from the ewes
- Main benefit is ability to target feed according to ewe needs in late pregnancy
- What are other advantages?
  - **Allows barren ewes to be removed - save on feed**
  - **Allows ewes to be separated according to lamb nos carried**
  - **Triplets adjacent to singles for ease of fostering**
- **Cost?**



# Rams

- How many ewes per tup?
- 10   40   70   100

# Rams 6-8 weeks pre-tupping (M.O.T.)



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- Dose for worms
- Feet
- Mouth /Teeth
- Testicles x 2 Large and Evenly sized
- Penis/ Prepuce
- Aim for Condition Score 4 by tupping time





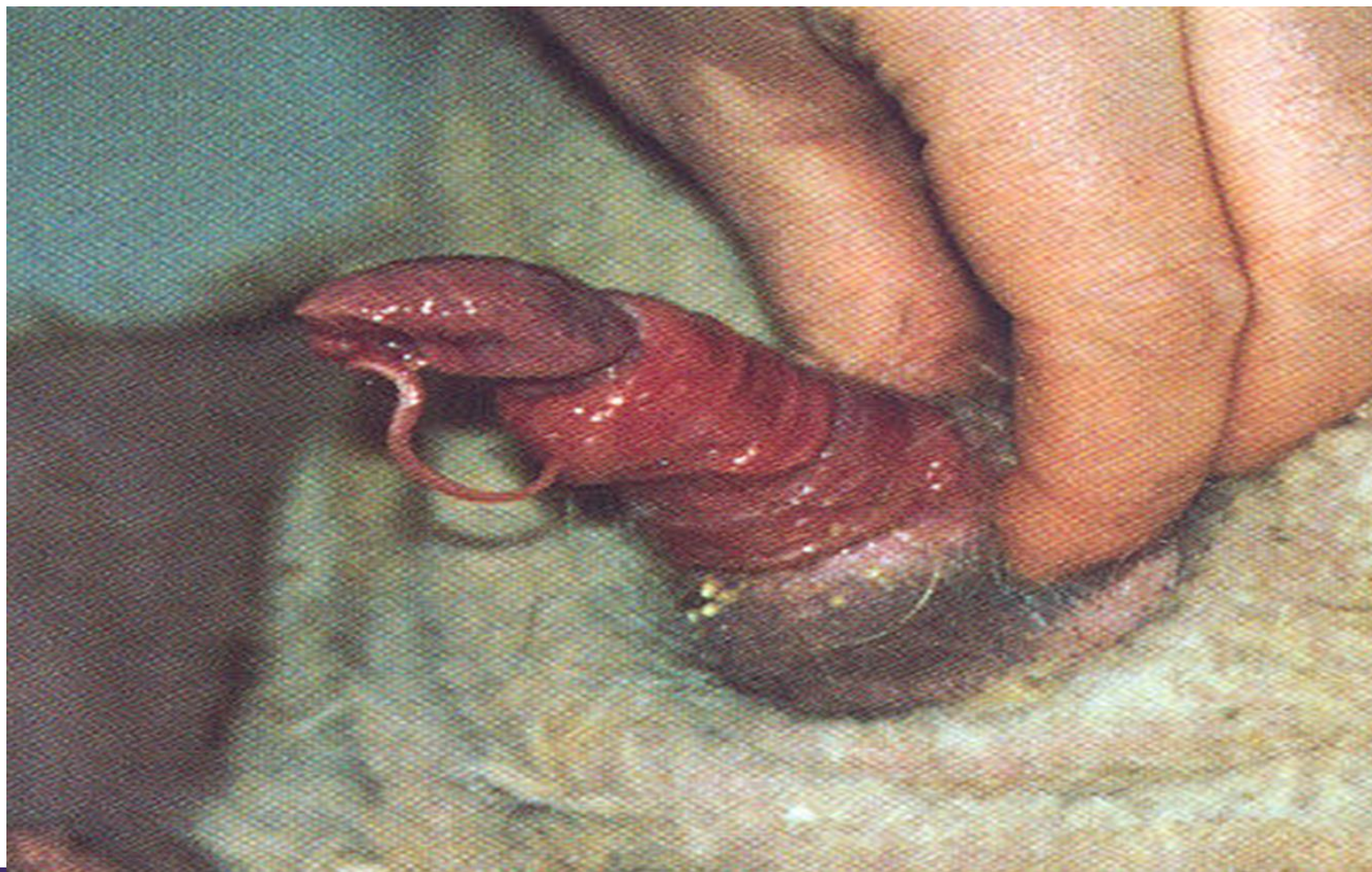
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# Raddling

- What are the Advantages of Raddling?
  - identifies ewes in oestrus
  - identifies tups are working
  - identifies tups not fertile
  - house according to marks
  - feed according to marks



- Consider vasectomised rams (teaser)
- Encourages ewes into heat earlier if turned out 1 cycle pre-tupping (pheromones)
- Picks out ewes that aren't in lamb, post tupping

# Performance figures

- Scanning percentage is the potential number of lambs per number of ewes tupped.
- Lambing rate is the number of live lambs born or marked per number of ewes tupped
- Lambing percentage is the number of lambs sold or retained compared to the number of ewes tupped.
- Ewe barren rate
- Ewe death rate
- Lamb losses/death rate



# Performance

	Top MLC	Example	Comments
<b>Flock of Lowground ewes</b>			
Ewe/tup ratio	41	40	Acceptable
	%	%	
Empty ewes	5	1	Very good
Ewe deaths	5	2	Very good
Prod ewes	92	97	Excellent
Total lambs born	171	180	Good
Lambs born dead	10	7	Good
Lambs born alive	161	172	Good
Lamb death after birth	9	20	Investigate lamb deaths
Lambs reared	152	152	Acceptable but room for improvement

# Evaluating Flock Performance



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Ewe efficiency 1 to 1 benchmark

- 72 kg ewe at mating, 173% lambing, sell lambs at 42kg
- $42 \times 1.73 / 72 = 1.01$  or 101% of ewe body weight produced
- Tup fertility
- Scanning/BCS/ ewe nutrition
- Maximising lambs reared
- Reducing lamb mortality
- Maximising lamb growth rates

Before breeding your own, consider



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- Keep a few lambs for the summer
- Buy some ewes that are in-lamb
- Buy ewes with lambs at foot

- Body Condition Scoring
- Ram MOT
- Ewe MOT

# Sheep Husbandry - nutrition



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# Ewe Feeding

Ewe feeding : 3 periods of importance

1. 6 - 8 wks pre-tupping → 4 wks post-tupping
2. mid-pregnancy
3. 6 wks pre-lambing → 4 wks post lambing peak milk

# Feeds available & suitable

1. grass - plentiful & cheap - varieties??
2. silage - common - pit (center of pit best) & big bale (care needed, use only good - discard bad)
3. hay - less common – more stem less leaf
4. Haylage – a drier silage, available in small bales
5. Barley - very practical fed bruised or whole - best (whole broken down by ewe - saving in time and electricity)



# Feeds available & suitable cont



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5. swedes - very suitable - low dry matter (beware if broken mouthed - needs chopped)
6. sugar beet pulp - very suitable (Shreds or nuts)
7. dark grains - very suitable - (careful if high in copper needs restricting)
8. straw - treated or with added p.a.s. or molasses - cheap but not recommended
9. **Propriety ewe feed- nuts, rolls, bends – simplest and most common.**

# Early & mid pregnancy

- After tupping, maintain condition, do not stress ewes.
- little growth of foetus
- avoid rapid wt loss
- Avoid loss of more than 0.75 BCS
- Over fat ewes benefit from wt loss



# Late pregnancy

- 70% of foetal growth during last 7 wks
- tremendous demand on ewe to supply nutrients to foetus(s)
- forage must be good
- Concentrate feed is highly likely to be needed:
  - a) to support growth of lamb(s)
  - b) to produce sufficient colostrum

# Late pregnancy cont

- concentrates provide energy & protein in small package
- rumen capacity reduced late pregnancy
- roughage intake decreases late pregnancy
- At least 16% protein for single bearing ewes and 18% for twins
  - consider - soya bean meal or rape seed meal for protein supply
  - remember min/vit supplement if making up own feed

# Flat rate v stepped feeding of concentrates

- either method satisfactory
- flat rate easier
- levels above 500 gms/day - feed x 2/day
- greedy ewes
  - acidosis
  - twin lamb disease (preg tox)

# Amounts to feed pre lambing

- It depends!
- A common diet for single bearing ewes on hay would be:
  - 6 weeks before – 0.2kg concentrate
  - 4 weeks before – 0.35kg concentrate
  - 2 weeks before – 0.5kg concentrate
- For twins,
  - 8 weeks before – 0.2kg concentrate
  - 6 weeks before – 0.35kg concentrate
  - 4 weeks before – 0.5kg concentrate
  - 2 weeks before – 0.8kg concentrate
- If silage, need less
- What if feeding triplets?
- Once over 0.5kg, split into two feeds

# Lactation

- Aim to produce as much milk as possible
- Good grass or supplement with blocks or concentrate
- Watch out for mismothering
- Energy requirements higher than pre-lambing
- Grass in some areas of Scotland may not supply sufficient quantity or quality till mid May
- Increased protein helps increase milk yield
- Peak requirement 3 weeks post lambing



# Feeding methods

Roughages      hay/silage/straw - cradles/ring feeders/racks

Concentrates      on ground (rolls) or in troughs



# Summary

- 3 important times to get nutrition correct
  - Pre and post tupping
  - Mid pregnancy
  - Pre and post lambing
- Roughage, energy, protein, vit & mins
- Learn to Condition Score

# Housing Sheep

- Sheep housing should be well ventilated with no draughts at animal level
- There should be sufficient trough space for each animal and sufficient lying area
- Buildings or pens should be free of anything that may cause injury such as sharp edges, hanging electrical wires or toxic paints
- Floors should be designed to avoid discomfort and solid floors should be well

drained

# Housing Sheep

- Space Requirements
  - Hoggs: 0.75-0.9m<sup>2</sup>/head
  - Pregnant ewes: 1-1.4m<sup>2</sup>/head
  - Ewes and Lambs: 1.8-2.2m<sup>2</sup>/head



# Bedding Material

- Must keep animal dry
- Keep animal clean
- Be comfortable
- Must be safe to use



- Maintain a healthy environment

Ensure that all troughs are free from leaks or cannot be easily spilled as this will prevent bedding from getting unnecessarily wet.

# Bedding Materials

- Straw- Most common. Can be Barley, Wheat or Oat Straw.
- Shavings/Sawdust- common in lambing pens, easier to use and reduces chance of lambs getting stood on. Can be expensive.
- Woodchips/woodfines can also be used. These must be free of contaminants and are not as effective as straw.

# Legislation

- Before you get sheep:
  - Register with SGRPID to get a ‘farm code’  
CPH
- Once you have sheep:
  - Register with your vet
  - Register with Animal Health to get a flock  
number
  - Register with BWMB



# Legislation

- Flock Register
- Annual Inventory
- Tags
- Movements and Transport Cert
- Medicines
- Standstill

# Thank You

