



Facts about Sheep

from Annette Holmenlund,

Hyrdetimer – Håndbog i fårehold og naturpleje,

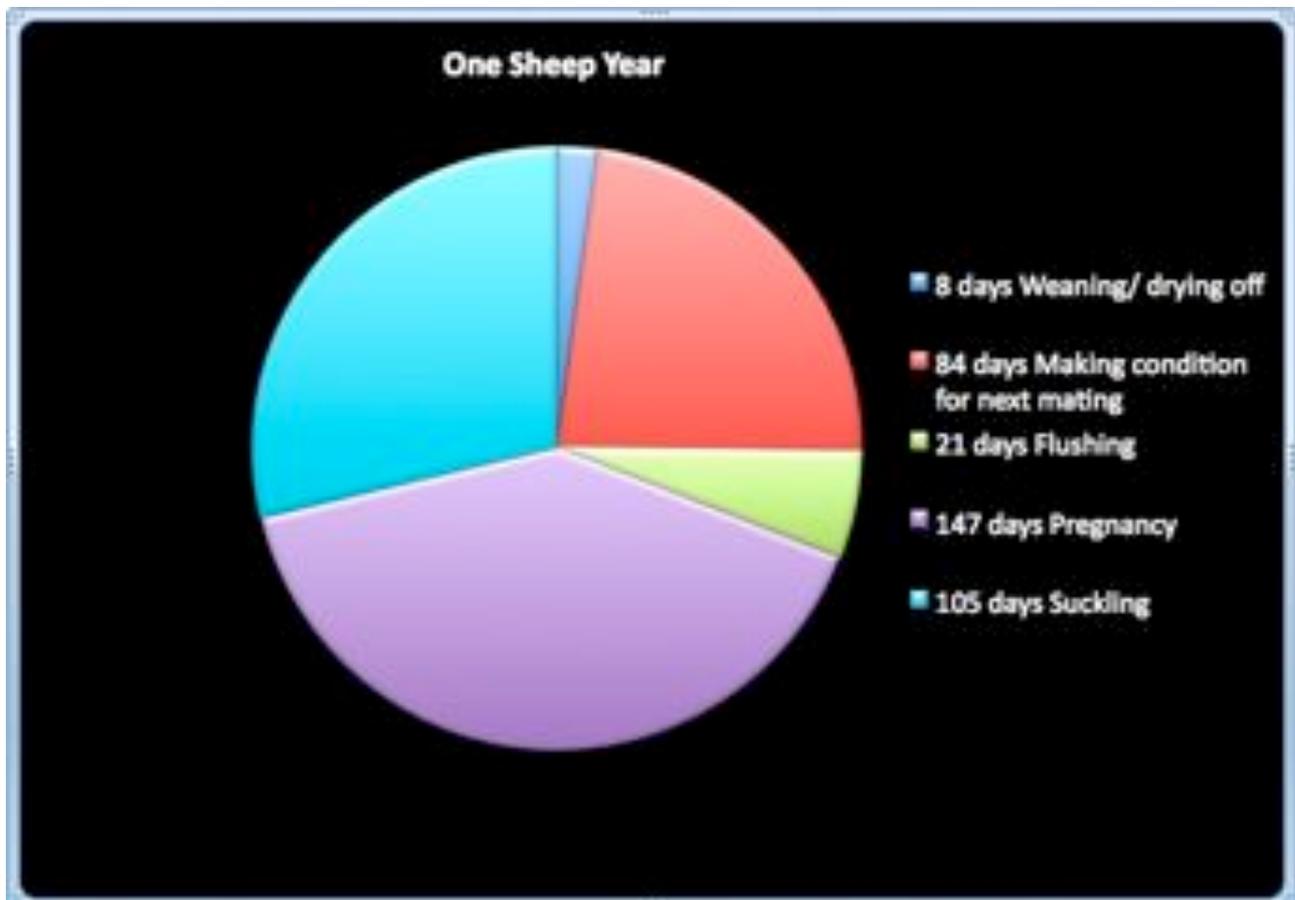
Aarhus: Turbine Forlaget 2007

The translation has been co-funded by the European Commission within the LifeLong Learning Programme, Action Leonardo da Vinci – Transfer of Innovation project Sheepskills



Facts about sheep

This chapter has important facts about for instance age at sexual maturity, heat season, pregnancy period, lambing season and weaning. It should give an overview of sheep biology, and how to plan the tasks during the year.



The most important dates for planning of lambing season (the lambs are weaned at latest at 3,5 months)

Planned lambing	Weaning 3,5 month	Flushing before mating	Mating	High pregnancy (7 weeks before lambing)
1th of January	16. April	17. July	7. August	13. November
1. February	17. May	17. August	7. September	14. December
1. March	14. June	14. September	5. October	11. January
1. April	15. July	15. October	5. November	11. February
1. May	14. August	14. November	5. December	13. March

Table 1. What happens to the ewes and what are the tasks during the phases of the year with sheep?

Sheep life cycle			
Phase in the ewes life	Duration	What happens to the ewe?	Shepherds task
Making ready for mating after the lambs are weaned 	12 weeks	Sheep in right condition to the next mating. Sheep in poor condition should get fatter, normal sheep keep condition, fat sheep loose condition. The aim is condition score 3. Rams are made ready for the next breeding season. Condition score should reach 3,5-4	Sort the ewes. Sort out ewes who should not be lambing next year. Put fat ewes on poor nature areas, normal ewes on normal nature grass and skinny ewes on good grass from crop rotation from arable land. Give the rams extra concentrate, to reach condition score 3,5 before the breeding season
Flushing 	3 weeks	Eves must increase their condition from 2,5-3. This will increase the number of eggs ovulated. The aim is that more sheep carry 2 lambs. Check testicle size of rams.	Move the sheep to good grass for instance grass seed fields or good aftermath Give extra concentrate or grain- Put in a teaser ram to simulate and synchronize the heat period of the ewes.

<p>Mating and first third of pregnancy</p> 	<p>7 weeks</p>	<p>Ewes are mated Oestrus occurs every 16-18 days. The embryos must attach itself to the uterine wall in 3-4 weeks after fertilizing.</p> <p>Ewes should avoid movement, dogs, changes in diet, and other kinds of stress during this period of implantation, because it can lead to loss of embryos and fewer lambs.</p>	<p>Send in the ram and control that he is mounting the ewes by putting a raddle harness on the ram. The raddle harness contains a crayon, which marks the ewes back when she is mounted for mating. Changing the crayons every 14 days will identify the repeat breeding ewes. Date for introducing the ram and day of mounting are recorded. Maximum 50 sheep per mature ram.</p>
<p>Mid Pregnancy</p> 	<p>7 weeks</p>	<p>The foetuses develop slowly, but the placentas are developing to feed the foetus at the strong growth in late pregnancy.</p>	<p>Now the sheep can stand moving. In the end of the period housing of the sheep is convenient and shearing is an advantage. Food care and health control and vaccination against clostridium</p> <p>Scanning lamb number is very useful</p>
<p>Late Pregnancy</p> 	<p>7 weeks</p>	<p>The foetuses grow fast. As they grow there is less capacity to roughage in the rumen and the nutrient requirements grows. There is a risk for twin lamb disease and casting</p>	<p>Feeding a balanced feeding plan changing to meet the requirement of the sheep?</p> <p>Make the stables ready for lambing.</p>

<p>Lambing</p> 	<p>1-3 hours</p>	<p>Water bag appearance, labour pain. (Dilatation)</p> <p>Expulsion (lambing)</p> <p>Afterbirth (placenta expelled)</p>	<p>Help the ewe if assistance is needed.</p> <p>Separate ewe and lamb in a lambing box after lambing.</p> <p>Help the ewe if afterbirth is not expelled after 24 hours.</p> <p>Help the newborn lamb to suck if necessary and to get colostrum.</p> <p>Dress navel in tincture of iodine to avoid arthritis (infection in the joints)</p> <p>Help the weak lambs.</p>
 <p>Suckling</p> 	<p>14 weeks</p>	<p>The nutrient to the sheep is 3 times the requirement for maintenance.</p> <p>The lambs can eat concentrate in the creep pen after 14 days.</p> <p>Be aware the sheep can get mastitis.</p>	<p>Feeding good quality roughage ad lib, Grain and concentrate after a feeding plan</p> <p>Check lambs can be limping.</p> <p>Be aware of hungry lamb. The ewe can be sick, probably mastitis.</p> <p>Check that lambs are moving correctly</p> <p>Feeding in lamb feeders daily.</p>
<p>Weaning</p> 	<p>2 weeks</p>	<p>The lambs are weaned. Ewes utter stop producing milk. (drying off)</p>	<p>Separate the lambs from the ewes and divide lambs in ram- and ewe-lambs.</p> <p>Put the lambs on new grass fields and check their thrift.</p> <p>Be aware of scouring and eventually fly attacks.</p> <p>Control the ewes for mastitis every second day</p>

Sheep Facts

Length of pregnancy	147 days, varies from 142-152 days (5 months minus 3 days)
Sexual maturity of ram lambs	4-6 months
Sexual maturity of ewe lambs	5-8 months
Age at first mating	8-10 month, 60 % of grown up weight
Breeding season	November to January for Nordic sheep breeds (short tails) July to February for specialized meat sheep breeds
Duration of heat	24-72 hours (normally 36 hours)
Duration of a heat circle	18 days (varies from 14-21 days)
Birth weight	3-6 kilo (depends on breed, big variation)
Mature weight	45-100 kilo ewes 60- 170 kilo rams
Lamb living weight at slaughter	40-50 kilo
Carcass weight	20-25 kilo
Carcass %	50%
Weight gain the first 2 month	200-400 gram per day
Age at weaning	min 6 weeks, normally 14 weeks
Pulse	60-80 beats per minute
Respiration frequency	10-20 breaths per minute
Normal temperature	38,5-40° C
Number of chromosomes	54
Wool production	2-6 kilo per (depends a lot on breed)

See age and health on teeth

The teeth can be used as an aid in determining the approximate age of a sheep, especially up to the age of four.

Sheep have eight incisors (cutting or biting teeth) on the lower front jaw. These are sharp and small in animals less than one year. They meet a hard pad (dental pad) in the upper jaw. At about 1-1,5 year, the center teeth will drop out and they are replaced by two permanent teeth.

Twenty-four molars (chewing or grinding teeth) are found in the back, six on each side of the upper and lower jaws. At about the age of two, two or more large front teeth appear, one on each side of the yearling teeth. The three or four year old has six permanent teeth, two more than the two year old. At four or five years of age, the animals have a complete set of eight permanent teeth in front. After this point, the age is judged by the amount of wear on the front teeth. As the animal ages, the teeth spread and drop out. It becomes difficult for her to eat properly, so care should be taken to make sure she eats sufficient amounts of food.



This ram lamb gets teeth checked. All teeth are still "milk teeth, so le lamb must be younger than 1,5 year

This young sheep has 2 permanent incisors in each side and her age is between 2-3 years. There is only a hard pad (dental pad) in the upper front jaw of ruminants.



Teeth change

Lambs have four incisors (front teeth) in each side of the lower front jaw. The fourth is in fact a canine tooth but working with the others as cutting and biting teeth. Incisors changes like following:

Age _____ exchange of incisors (front teeth)

1- 1,5 years centre tooth
2-2,5 years second tooth
2,5- 3 years third tooth
3,5- 4 years fourth (canine) tooth

Development of molars (chewing teeth)

- The 3 premolars (front chewing teeth) in both sides in upper and lower jaws (12 all in all) appear at 4 week ages. These are changed at 2 years age.
- The 3 molars (hind chewing teeth) in both sides in upper and lower jaws (12 all in all) appear when the lamb is from 10 month to 2 years old

Teeth formulate on sheep from birth to 4 years (only one side is counted)

	Cutting teeth	Canine	Pre molars	Molars
Upper jaw	Dental pad		3	3
Lower jaw	3	1	3	3
Milk teeth appears	0-21 dental pad	3 -4 weeks	0-4 weeks	Not in milk teeth
Teeth changes	1-3 years	3-4 years	21-24 month	Appear 9–24 month