

The Shepherd and their Flock

Education Pack

16 – 18 years of age

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The Shepherd and their Flock

Introduction

Many farm animal keepers discuss the subject of sheep farming in a pessimistic way. With the rapid pace of technical advancement in other farm enterprises such as dairying and crop growing, the contrasting pace of progress in the sheep profession has led many farmers to question the viability of keeping the sheep flock. However, the shepherd's expertise may play a role in increasing the financial gains by asserting good welfare practice, good nutritional management and by aiming for low input high output management.

This pamphlet is written resulting from a background of experience based on commercial sheep enterprise and it seeks to guide those who are keeping sheep for the first time or for those with a keen interest in the species. The booklet starts highlighting the benefits of the five freedoms, then gives a definition of sheep, it goes on to describe the routine care and management of the flock. It gives a detailed account of how and why practical tasks are performed and links the reader to websites where a more detailed knowledge can be gained.

Agricultural Animal Welfare

It is important to have a clear knowledge and understanding of the basics of good animal welfare. UFAW (2016), sum up these requirements by the concept known as the Five Freedoms:

1. Freedom from Hunger and Thirst
2. Freedom from Discomfort
3. Freedom from Pain, Injury or Disease
4. Freedom to Express Normal Behaviour
5. Freedom from Fear and Distress

UFAW (2016), explain the application of these theories as being fundamental for a healthy flock and, in turn, is conducive to better financial returns. Therefore, before starting your own flock, it would be beneficial to combine the theory of shepherding with as much practical experience as possible.

It is always good to start learning with the very basics of any branch of learning. Therefore, by knowing exactly what sheep are, it will be easier to apply the concepts of the five freedoms.

The definition of a sheep

According to Lynch, Hinch & Adams (1992), sheep are a gregarious and preyed upon species, sheep are quadrupedal, ruminant mammals, are even-toed ungulates and herbivores. These authors go on to explain that sheep are sociable animals and do not like being isolated from the flock, being on their own will cause them distress. Knowledge of their anatomy and physiology will allow the shepherd to provide the best housing, nutrition and husbandry practice, which helps prevent ailments and minimise the risk of disease (Lynch, Hinch and Adams, 1992).

A Guide to Management

Generally, a Shepherd checks the flock twice a day, morning and evening. The morning checks are usually very thorough, allowing the rest of the day to give treatment or veterinary care (Brown & Meadowcroft, 1990).

Table 1 below (p.5), summarises the daily routine of the sheep keeper. Daily check maximises the early detection of ailments allowing for quick recovery and reduced risk of secondary ailments.



Fig.1: Texel Ewes

Birkenshaw (2014)

Table 1: Routine Flock Health Monitoring

	Am checks	Pm checks
Monday	Check animals according to the Fact sheet on page 9 Check fence parameters Water troughs – fully operational and are full of fresh, clean water	Check all animals
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Adapted from Brown & Meadowcroft (1990)

Table 2 below, summarises the routine monthly & annual management required to maintain a healthy flock.

It is good practice to body score sheep every 4-6 weeks, any thin ewes can be separated for extra feed ration, lambs at 6-8 weeks old then weekly until finished.

Ewes require annual 7:1 vaccine against clostridial disease. At six weeks of age lambs receive 1st 7:1 Vaccine, then 4-6 weeks later the lamb receives 2nd vaccination. The rams and ewes are sheared in May – July. Foot care consists of 2 vaccines at a 6-month interval or bathing in zinc/copper or formalin and trimmed when appropriate. Replacement ewes are purchased at a rate of 25% per year.

Finally, [faecal egg samples](#) are taken during the spring – autumn at 6-8 weeks apart and dosed as appropriate.

For information about how to start your own flock and routine husbandry task [click here](#).

Table 2: Monthly & Annual Flock Health Plan

	MANAGEMENT	VACCINATION	PARASITES & TREATMENT	References
JANUARY	Monitor body condition Click here for more details		Fluke – chronic stage Scab	Adapted from Brown & Meadowcroft (1990) and Henderson (1995)
FEBRUARY	Body condition score ewes Feed concentrates at gradually increasing rate from 6 weeks before lambing	Ewes: pre-lambing booster for Clostridial diseases & Pasteurella E. Coli (If administering more than one vaccine, allow recommended times between vaccines – consult instructions or seek advice from a veterinarian)		
MARCH	Lambing: Record lamb birth weights/single/twin		Nematodirus: Drench ewes at turn out	
APRIL	Condition score ewes Record lamb six week weight	Lambs: 1 st clostridial vaccination Ewe replacements & Ram: Annual clostridial Booster	Fly strike – dip or pour-on treatment, repeat at recommended periods until threat has passed	
MAY	Shearing For instructions click here	Lambs – 2 nd vaccination Bluetongue whole flock	Faecal Egg Count lambs – worm as appropriate	
JULY	Wean lambs		Faecal Egg Count lambs – worm as appropriate	
AUGUST	Foot care – treat individually/bath Lamb sales (location dependant) Cull ewes: ill thrift, barren or old			
SEPTEMBER	Body condition score ewes MOT rams Purchase ewe replacements	Ewes abortion vaccination	Faecal Egg Count lambs – worm as appropriate	
OCTOBER	Put the Rams with the ewes 1:25 or 1:50 depending upon experience		Drench for worms and fluke Scab	
NOVEMBER	After 2-3 oestrus cycles (6 – 8 weeks) remove rams			
DECEMBER	Pregnancy scan ewes (@40 – 90 days)			

Reproduction & Lambing

The table below shows that sheep will naturally come into season with the onset of day length (Henderson, 1995; Brown & Meadowcroft, 1990). Henderson (1995) and Brown & Meadowcroft, (1990) explain that in September when the nights become darker, earlier, the ram and ewe will come into season. The ewe is pregnant for approximately 145 days. Generally, ewes give birth to 2 lambs per season and at birth the lambs weigh approximately 4 – 6kg. The lambs are weaned from their mother at 12 weeks old (Henderson, 1995; Brown & Meadowcroft, 1990).

A ewe is bred from at 18 months old and will breed for approximately six years (Henderson, 1995; Brown & Meadowcroft, 1990).

Table 3: Biological data of a Ewe

	Length of oestrous cycle	Duration of oestrus	Mechanism of ovulation	Length of gestation	Birth weight	Weaning weight	Weaning age	Economic breeding life	Age at 1st mating	Average litter size
Sheep	16 – 17 days	24 - 48 hours	Induced by Daylight	145+/- 5 days	4 – 5 kg	40 kg	10 – 12 weeks	4 – 6 years	18 months	2

Henderson (1995) & Brown & Meadowcroft (1990).

Lambing

Lambing time is the most rewarding time of the year; however, it can be very stressful. It is the culmination of the Shepherd's efforts throughout the year to ensure the good health, nutrition, and overall wellbeing of the sheep result in the successful birth of strong, healthy lambs. Most ewes lamb naturally, but sometimes lambs are malpresented which means the Shepherd needs to assist the ewe. [Click here](#) for examples of malpresented lambs.

This is a [video](#) presented by Adam Henson explaining the normal lambing process and this is a [video](#) explaining the process when the lamb is malpresented.



Fig.2: Romney Ewe and Lamb

Boulden (2014)

FACT SHEET 1

The procedure for health checking sheep and the appropriate method of restraint when performing a thorough health examination.

Introduction

Making observations are of paramount importance to ensure the animal is in good health and the prompt treatment in the event of abnormalities. Furthermore, it is also necessary to perform observations on the animal holding area as well as the animal.

Therefore, this factsheet highlights the points to consider when monitoring the housing facility. The document then goes on to discuss the clinical observation pathway and appropriate methods of restraint suitable when performing a full health check on sheep.

General observation of the animal holding area

Wolfensohn and Lloyd (2013) explain that on entering the holding area e.g. housed animals during lambing or field, each animal needs to be thoroughly checked for signs of ill health (For an example of a healthy sheep refer to Factsheet 3). However, it is also important to assess the animals' surroundings and points to consider are as follows:

- Examine the pen from the outside and note the conditions in the barn
- If outside: check the field for abnormalities e.g. predators
- Check water troughs
- Check boundaries
- If housed: look at the pen sides and the bedding
- Observe the behaviour and demeanour of the animal
- Note abnormal movements (limping, paralysis, spinning, tremors)

Wolfensohn and Lloyd (2013)

The Clinical Observation pathway

When performing a health assessment, the procedure is as follows:

Start at the front of the animal and check around the animal in a circular motion, in the order described below:

Head	Head tilts to one side. Ear problems or neurological ailment e.g. cerebrocortical necrosis (CCN)
Face	Disfigured face owing to misaligned teeth
Mouth	Drooling, lesions, abscess
Nose	Nasal discharge, sneezing
Eyes	Clear, bright and moist
Ears	Ear injuries

Adapted from Wolfensohn and Lloyd (2013) & Pritchett-Corning *et al.* (2010)

Move onward to the body of the animal

Coat	wool loss, urine scale, starey
Skin	Pink, skin defects, abrasions
Body Condition	Body condition scoring is a way to assess the overall health and weight of an animal through sight and palpation (Appendix 2)

Adapted from Wolfensohn and Lloyd (2013) & Pritchett-Corning *et al.* (2010)

Continue towards the caudal aspect of the body

Digestive & Urinary System	Normal/soft/loose faeces, diarrhoea, no faeces Discoloured faeces, rectal prolapse, healthy urine, bloody urine, excessive or no urine
Reproductive system	Swollen vulva, scrotal swelling, vaginal or uterine prolapse, vaginal/penis septum.
Tail, limbs	Broken limbs, foot/tail injuries, swollen joints

Adapted from Wolfensohn and Lloyd (2013) & Pritchett-Corning *et al.* (2010)

Turn the animal (Factsheet 2) and assess the underneath of the animal's body

Observation details for the veterinary (if appropriate) as follows:

- The age or weight, gender and history (if known)
- The observation:
Where on the animal the abnormality was found
A description of the abnormality
- Duration the abnormality has been present
- Whether other animals have similar signs
- Any other information that may help to achieve a diagnosis or treatment

Wolfensohn and Lloyd (2013) & Pritchett-Corning *et al.* (2010)

Notes

A thorough check is not always necessary by turning all the animals. However, it may be required to restrain an animal to investigate an abnormality.

Ensure to describe exactly and completely what you see, hear and smell about the animal and its environment.

FACT SHEET 2

The method for turning when performing a health check on a sheep

- a) Stand the sheep in front of you
- b) While holding the head of the sheep in your left hand, place your hand under the jaw.
- c) Your left knee should be behind the left shoulder of the animal.
- d) Your right leg should be placed against the sheep's side by the left hip
- e) Place your right hand on the sheep's back over the hips.
- f) Turn the sheep's head so its nose is pointed towards the rear.
- g) As soon as you bring the nose around you will feel the weight of the sheep lean against your legs.
- h) Using your right hand apply sufficient pressure against the hip.
- i) Take a step back with your right leg. At this point the animal will start to lose balance and the rear end of the sheep will start to drop towards the floor.
- j) Continue to bring the head around until the animal is sitting down with its back leaning against your legs
- k) Turn on your left foot and step behind you with the right foot.
- l) The sheep should now be comfortable but immobilised.

Upton & Soden (1991)

Health & Safety

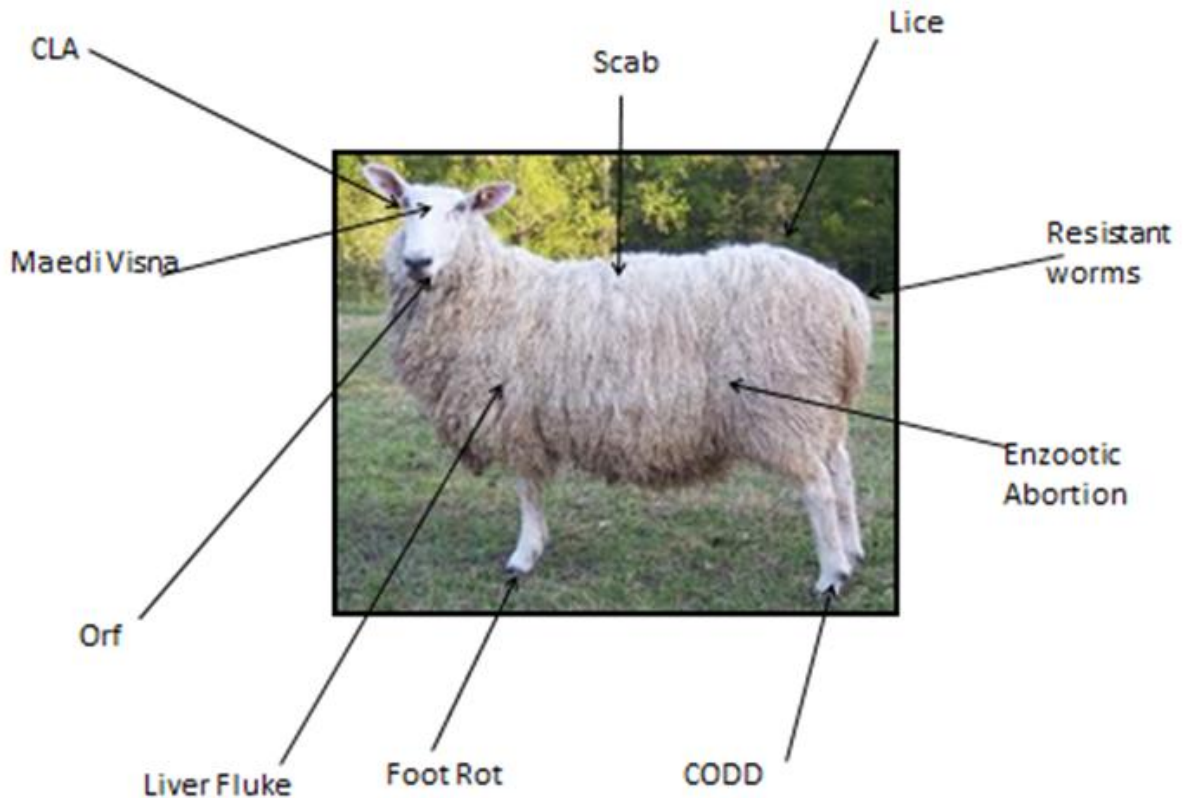
Whenever handling animals, the appropriate health & safety precautions should be taken according to Health & Safety at work Act 1974.

Protective Clothing

Protective clothing, relevant to the task performed, must be worn. For example, overalls, gloves, goggles and steel capped shoes.

FACTSHEET 3

Disease and ailments found in sheep



Description of a healthy sheep

A healthy sheep will have a good fleece, no discharge from the ears, eyes, mouth or nose. The faecal and urine output will be noted in their holding area and be of expected frequency, colour and consistency. Breathing will be quiet and regular. They will be alert and interested in their surroundings. They interact with the flock or handlers and move freely.

Instructions to download interactive poster

1. [Click here](#)
2. Click "Present" in the top right hand
3. Click on each disease or ailment to learn a bit more about each case.

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