

# Unit 11i: Ectoparasites Factsheet

## Introduction

Ectoparasites feed on the outside of their host. They affect cattle and sheep and can cause severe irritation and hide damage.

### A. Sheep ectoparasites

The main ectoparasites are:

1. Blowfly larva
2. Sheep scab
3. Lice: biting and sucking
4. Ticks

#### 1. Blowfly larvae

Fly strike on soiled damp greasy wool is common in warm muggy conditions in summer and autumn. The Greenbottle lays her eggs on the wool and dung patches and the maggots hatch within 2-3 days and feed off the skin. Their toxins plus the physical damage could kill the sheep within a few days.

#### Symptoms

Sheep:

- Wag their tail
- Twist around towards their hinds
- Nibble the wool, stamp their feet
- Isolate themselves
- Seek shade in hedges
- Have dark moist patches on the wool.

#### 2. Scab

The parasitic mite responsible for sheep scab is *psoroptes ovis*, which is a skin surface feeder. The entire development of the mite takes place on the skin surface. The female lays up to 80 eggs, which hatch in 1-2 days. The life cycle is completed in 14 to 17 days. The mites pierce the epidermis and feed off the lymph. Yellowish crusts develop on the skin and the fleece becomes moist and matted. There is intense irritation. About 8-12 weeks after infection the sheep will have lost most of its fleece and may die through lack of food. It spends so much time scratching it doesn't eat

#### 3. Lice

There are two main types that affect sheep:

- a. Biting louse - *damalinia ovis*
- b. Sucking louse - *linognathus ovis* and *linognathus pedalis*

#### **a. Biting lice**

- feed on exfoliated skin cells
- on the neck and back area
- rubbing, scratching and biting are main symptoms
- lower wool quantity and quality
- problem for housed sheep, particularly in winter
- killed by dips or pour ons

#### **b. Sucking lice**

- occur on the face and feet and lower limbs
- debilitating effect
- anaemia
- killed by injectable ivermectins

### **4. Ticks**

Ticks are associated with rough and unimproved pastures. During the lifecycle of the tick, each stage must feed on an animal for a short time to obtain a blood meal. The adult female ticks attach onto the skin. Ticks are particularly numerous in spring but can be seen at any time of the year.

Ticks cause:

- Tick pyaemia
- Louping ill - viral disease of the nervous system

#### **Tick pyaemia**

The feeding of the tick on the blood causes abscesses in the joints, spine and internal organs of the lambs. Badly affected lambs cannot keep up with their mothers and die of neglect.

### **B. Cattle ectoparasites**

#### **a. Lice**

#### **b. Mange**

#### **a. Lice**

Lice cause irritation of the skin. This leads to biting, scratching and rubbing by affected cattle. These cows may also damage fences, trees and buildings while rubbing.

Lice affects milk production and the growth rate of cattle as they spend a long time scratching and not eating.

#### **Types of lice**

There are four common species of lice found in the UK, which can be divided into two different categories:

### **i. Sucking lice**

There are 3 species commonly found in the UK. These have relatively small narrow heads designed to pierce the skin and suck blood. In large numbers they can cause anaemia. They are usually found around the head and neck of cattle

### **ii. Biting lice**

Biting lice have larger, rounder heads. They feed on skin debris, blood and scabs. Biting lice produce a more severe irritation than sucking lice.

### **b. Mange**

Mange is a collective name for allergic dermatitis caused by **mites**.

Two types:

- Burying e.g. *sarcoptes scabiei* - found on the neck
- Non-burying e.g. *chorioptes* and *psoroptes* - found on base of tail