

Clinical Examination Guidance

When conducting a clinical examination for sheep scab:

- conduct a thorough examination
- check wool loss
- once the examination has taken place mark the sheep.

Lesions

- 1. Check for lesions:
 - these are most likely to be located at or close to the point where the sheep is nibbling or scratching, check the fleece:
 - o if damp and chewed
 - o if licked clean, or
 - o dirty due to scratching with a hind leg
 - conduct a thorough examination of the surface of the skin by palpation to locate the lesions (scabs and crusts)
 - manipulation of the area of the lesion with the fingers will sometimes initiate a hypersensitivity (nibble) reflex
 - the degree of hypersensitivity may be quantified using a hypersensitivity index. Use the Guidance for Diagnosing Sheep Scab (SS11)
- 2. If the lesion has covered the entire animal and no leading edge is apparent, the disease is said to be regressing. Under these circumstances, examine all the cryptic sites, the:
 - infra-orbital fossae
 - pinnae
 - crutch/perineum
 - inguinal fossae.

Mites

- 1. Check and locate mites:
 - check around the moist edge of the lesion with the greatest numbers found at the leading edge. The lowest point down the flanks or the furthest point from the head (due to the motion of lipid):
 - o this leading edge will often be moist with serous exudate and sometimes has a greenish yellow tinge
 - o mites may be seen around this edge
 - o the adult females are easiest to see being approximately 1mm in diameter and pearly white in colour
- 2. During the examination, the APHA Veterinarian may find:
 - the scab mites have migrated back into the centre of the lesion giving an atypical form of scab (the 'flaker')
 - the lesion is very dry and flaking, and enormous numbers of mites are located on and under the flakes
 - these animals are highly infective to other sheep.

Taking Skin Scrapings

- 1. A correctly taken skin scraping can yield a positive result almost immediately. When taking skin scrapings:
 - take a scraping from the leading edge of the lesion
 - be aware fleece or wool samples alone are not sufficient for adequate diagnosis
 - use curved scissors:
 - o remove excess fleece down to skin level
 - o place this separately into a minigrip bag or similar
 - o ensure a secure seal is in place
 - expose the edge of the lesion:
 - o take the skin scraping using a sharp, disposable scalpel
 - o hold the scalpel at right angles (approximately 90 degrees)
 - o shave rather than scrape the scab from the skin
 - o it is not necessary to draw blood
 - take scrapings from several affected animals and pool them:
 - o carefully scrape the scalpel blade on the inside of a plastic screw top container
 - o use a Universal bottle to include adherent skin/scab with the sample

dispose of the scalpel safely.

Collecting mites

- 1. When collecting mites:
 - collect a few mites (a mounted needle is useful)
 - examine the mites under a compound microscope at a magnification of x 100
 - the presence of a two-jointed, three-segmented pedicle on legs one, two and four is the characteristic feature of *P. ovis*
 - diagnosis must be confirmed by APHA Carmarthen Veterinary Investigation Centre
 - ensure a written record of the examination including a description of all clinical signs exhibited by the sheep is made.

APHA is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Government and Food Standards Agency to safeguard animal and plant health for the benefit of people, the environment and the economy.