

Assessment of Udder Health in Dairy Sheep

DATE OF ASSESSMENT	MILKING SYSTEM	FARM NAME				FLOCK VETERINARIAN
Average # ewes milked in previous 12 months		Avg. # days post-lambing ewes put into milk-line			Avg. length of lactation (milked)	
MEASUREMENT OF PERFORMANCE		PREVIOUS LEVEL	GOAL FOR FLOCK	CURRENT LEVEL	ACTION NEEDED?	ADDITIONAL ASSESSMENT
ASSESSMENT OF CLINICAL MASTITIS						
Annual incidence of clinical mastitisⁱ (%) <i>Calculate: (# ewes with 1 or more cases of clinical mastitisⁱⁱ in last 12 months / average # ewes milked in last 12 months) X 100</i>		< 5%			<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Investigate stage of lactation, season, parity of animals with clinical mastitis Culture cases to determine if contagious or environmental organisms Review milking management, milking equipment
Annual incidence of repeat cases of clinical mastitis (%) <i>Calculate: (Total # cases of clinical mastitis in last 12 months / average # ewes milked in last 12 months) X 100</i>		<1.5 X value above			<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Culture cases to determine organism. Investigate reasons for failure to manage clinical cases (e.g. treatment protocols)
Prevalence of ewes with a blind gland (%) <i>Calculate: (Total # of glands that did not produce milk in the last 12 months/total # of ewes milked in last 12 months) X 100</i>		< 5%			<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Examine history of ewes with blind glands to determine reason. E.g. mastitis, teat damage. Review culling policy.
ASSESSMENT OF SUB-CLINICAL MASTITIS						
Proportion of ewes with SCC level > 400,000ⁱⁱⁱ (linear score 5) each test (%) <i>Calculate: (# ewes with SCC > 400,000 at last milk test/# ewes tested) X 100</i>		< 20%			<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Investigate stage of lactation, season, parity etc. of animals with subclinical mastitis Review milking hygiene and maintenance of milking equipment Review management of ewes with contagious mastitis
Incidence of new infections during lactation (%) <i>Calculate: (# ewes with SCC > 400,000 at last milk test and ≤ 400,000 at previous milk test/# ewes ≤ 400,000 at previous milk test) X 100</i>		< 5%			<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Review hygiene of environment Determine prevalence of teat end lesions and their cause (e.g. over-milking, high vacuum) Review biosecurity protocol when purchasing animals Investigate risk from nursing lambs of teat damage

Table VII.2 – A Guide to Udder Health for Dairy Sheep – November, 2013

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MEASUREMENT OF PERFORMANCE	PREVIOUS LEVEL	GOAL FOR FLOCK	CURRENT LEVEL	ACTION NEEDED?	ADDITIONAL ASSESSMENT
Prevalence of chronic infections (%) <i>Calculate: (# ewes with SCC > 400,000 at 3 or more tests this lactation / total # lactations assessed) X 100</i>		< 5%		<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Determine period of onset of chronic mastitis cases with respect to stage of lactation, parity, season Culture to determine pathogen type Investigate status of maedi visna infection in the flock
Prevalence of infections at first test post-lambing (%) <i>Calculate: (# ewes with SCC > 400,000 at first test post-lambing/total # first tests) X 100</i>		< 10%		<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Determine parity of affected animals Investigate whether due to damage from nursing lambs prior to placing in milk line Review dry-period mastitis treatment protocols and hygiene at treatment Investigate dry-off management Review environment of dry ewes
ANIMAL LOSS DUE TO MASTITIS					
Turnover rate due to mastitis (%) <i>Calculate: (# ewes culled and died due to mastitis/average # milked in last 12 months) X 100</i>		< 5%		<input type="checkbox"/> YES <input type="checkbox"/> NO	<ul style="list-style-type: none"> Review treatment protocols, including methods of detection of ewes with clinical mastitis Investigate causative agents causing death (e.g. <i>Staphylococcus aureus</i>) Investigate and review as outlined above under clinical and subclinical mastitis Review culling policies as well as areas above
Incidence of ewes dying of mastitis annually (%) <i>Calculate: (# ewes dying of mastitis / avg. # milked in last 12 months) x 100</i>		< 0.5%		<input type="checkbox"/> YES <input type="checkbox"/> NO	
Proportion of ewes culled due to mastitis (%) <i>Calculate: (# ewes culled due to mastitis / avg. # milked in last 12 months) X 100</i>		< 5%		<input type="checkbox"/> YES <input type="checkbox"/> NO	
Proportion of ewes culled, that were culled due to mastitis (%) <i>Calculate: (# ewes culled due to mastitis / total # ewes culled^{iv} in last 12 months)</i>		< 20%		<input type="checkbox"/> YES <input type="checkbox"/> NO	

ⁱ A case of clinical mastitis is one in which there is a change to the udder and / or milk of one or more glands as detected by visual inspection

ⁱⁱ Count ewes with multiple cases of clinical mastitis only once.

ⁱⁱⁱ You may wish to lower this cut-point as udder health improves and average flock SCC drops. A goal would be to use SCC > 200,000 (linear score 4)

^{iv} Do not include ewes that were sold for dairy, i.e. into another flock to be milked, but only those ewes sent to slaughter

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