

Summary of the notes for each technical topic: [Scouring and dag formation](#)

Subtopic	New information, research and extension opportunities	Comments and Boss URLs (where there is existing information)
<ul style="list-style-type: none"> <li>• Causative factors of scouring and dag formation</li> <li>• How can causes of scouring be diagnosed</li> </ul>	New information	The diagnosis of scouring needs to consider a diagnostic flow chart including: sheep class, age, % affected, severity of dag, production impact, season and if it is a repeat problem, culture for faecal bacteria (Yersinia, Salmonella, coccidia), worm egg count (WEC), drench resistance, pasture assessment (which plants, e.g. phalaris), dag score, body condition score (BCS), trace elements (Cu, Co, Se), endophytes and OJD.
		Increase N and decrease Mg in the diet will increase scouring.
		Timing of lambing and shearing dates to best manage scouring and dags.
		Less mulesing has led to an increase in dags.
	R&E opportunity	Need to have a photo library on WormBoss indicating the pattern of scouring.
		Need an epidemiological study to identify risk factors.
		Need a direct test for hypersensitivity (e.g. PCR)
		Consider a membrane-bound SNAP test.
Define the benefit of an ML drench to suppress breech strike in dag.		
<ul style="list-style-type: none"> <li>• Current control recommendations</li> </ul>	New information	WEC, consult a vet, cull scouring sheep, use selection for low dag ASBV (but there may be different causes of dags), response to treatment (persistent anthelmintics and antibiotics), use preventative flystrike treatment and ignore. <a href="http://www.wormboss.com.au/tests-tools/management-tools/breeding/using-wec-and-dag-asbv.php">http://www.wormboss.com.au/tests-tools/management-tools/breeding/using-wec-and-dag-asbv.php</a>
		Identify sires that scour and cull them.
	R&E opportunity	Need a benefit:cost study to determine the use of capsules to control scouring ( <i>NOTE: downside of capsule use may be increasing drench resistance</i> ).
Define the relationship between scouring and dags.		
<ul style="list-style-type: none"> <li>• The role of early L4 stages and hypobiosis</li> </ul>	New information	This appears to be influenced by region (more in parts of WA), larval stage, worm species, and possibly L4 antigens. <a href="http://www.wormboss.com.au/worms/roundworms/signs-of-worms.php">http://www.wormboss.com.au/worms/roundworms/signs-of-worms.php</a>
		AWI report on the causes of dags needs to be published.
	R&E opportunity	Need to confirm if it is early L4 stages or emergence of hypobiotic stages that are associated with scouring.
		Need to identify if there is a larval trigger point.
		Need a much better overall understanding of hypobiosis.
Need to explore the role of immune modulators such as interleukin blockers.		