

Liver fluke: Testing, Managing and Treating.

Risks associated with liver fluke vary throughout the year with particularly high numbers found on pasture in Autumn. Testing an animal for fluke can be tricky because the parasites take up to 12 weeks to begin producing eggs which can be detected in the faeces. During this time the fluke migrate through the liver, damaging its structure, and affecting its ability to digest food and remove toxins from the blood. This leads to acute liver damage, production losses, weight loss and even death. If an animal survives this acute phase of infection then the fluke infection will become chronic and the animal will suffer slow liver failure as the fluke lives off bile, liver tissue and blood.

Methods for testing Early detection of fluke infection in a flock is important to minimise the effects of acute fluke and the associated production losses. Some available options are:

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TEST	STOCK	SAMPLE	NOTES				
		USED					
Faecal Egg	All	Faeces	Quick and simple, can				
Count			give false negatives				
Copro-	All	Faeces	Gives earlier indication				
antigen			of exposure than tradi-				
testing			tional egg count				
Serology	New	Blood	Does not tell you				
	Season		when exposure				
	Lambs		occurred, not				
	Laiiios		appropriate for older				
			stock				
Post	All	Carcass	Excellent screening				
Mortem			tool, something you				
WIOITEIII			can learn to DIY				
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Management:

Control should be farm specific and farmers must consider all livestock together. Fluke control measures include:

Grazing Management-Keeping stock off the wettest fields in the autumn and winter when the incidence of disease is at its highest can reduce the risk from fluke; as can avoiding cograzing of sheep and cattle as this can amplify the disease.

Snail Habitat Management- Where fluke infection is present, identification of snail habitats (muddy areas) and fencing off livestock offers some measure of control. Drainage eliminates

the snail habitat and offers an effective means of control.

Active ingredient		Age of fluke in weeks (% kill rate)												Optimum time of year	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	to use
Albendazole		50-70% 80-99%									6	Spring / summer			
Oxyclozanide		50-70% 80-99%									Spring / summer				
Nitroxynil								50-90%	6			91-999	6		Late autumn / winter
Closantel			23-7	73%	91%		91-	95%		97-100%					Autumn
Triclabendazole (assuming a fully susceptible population)	90- 99%									Autumn					

Treating:

Triclabendazole is the **only** active ingredient able to kill all life stages of the parasite. However, in some parts of the country resistance to this flukicide has developed. Fluke prevention and control should be part of a "whole farm" approach (in conjunction with the farm vet) to parasite control in the Flock/Herd Health Plan. For Dairies are treatment options are even more limited—speak to us find out your options.

https://www.farmhealthonline.com/disease-management/sheep-diseases/liver-fluke-sheep/ https://www.farmhealthonline.com/disease-management/sheep-diseases/liver-fluke-sheep/ https://www.scops.org.uk/internal-parasites/liver-fluke/treating-liver-fluke/



Let's Talk Tupping Time...

There are many aspects to ensuring the success of your flock at this key time of year, here we focus on a few key factors:

Ram Health

A thorough tup 'MOT' at least 6 weeks before tupping is an essential part of the flock calendar. The sperm production cycle is 6-8 weeks, so after any injury, illness or stressor a 6-8 week period of sub-fertility is likely to follow. This includes heat stress so it is worth keeping in shady areas, providing ample water and removing wool from the testicles of young tups in the 6 weeks pre tupping. Handling etc should be minimised in this period and vaccination etc. avoided.

An appropriate regime of worm and liver fluke testing and control is essential. Don't forget about quarantine treatments for newly purchased rams, we can provide single doses of "Orange" wormer if required

Body condition (BCS) needs to be optimal (around 3.5). Over fit is as detrimental to fertility as too thin, so if purchasing new rams either avoid those in "show condition" or allow time to thin down. Check teeth and feet carefully and treat accordingly. Properly examine testicles – by **feel as well as observation** – looking for: even size, free movement within the scrotum and firmness (like a ripe tomato(!) – not hard). Check over skin for parasites and sores.

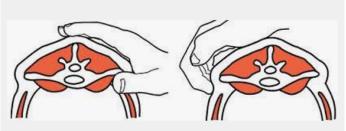
Supplementation- if condition is below 3.5, take action. Pasture cover >6cm or supplementary feeding will be required. It is worth considering supplementation with selenium if your farm has a known deficiency or sheep are on young swards. Selenium is a key structural component of sperm and deficiency can have a severe impact on fertility.

Fit harnesses prior to introducing rams to the flock to allow time to settle in.

Ewe Health and Nutrition

Ewe body condition is the engine that drives your flock performance and regular monitoring by **feel not eye** is essential. For tupping aim for BCS of 3.5 (2.5-3 for hill flocks). Assess BCS 10-12 weeks pre tupping to allow time for supplementary feeding or priority access to lush pasture. Again swards >6cm or concentrate feed are recommended.

Over fit ewes benefit from bare pasture or even being brough inside on a straw based ration.



Ideally, ewes should be split in to 3 groups – fat, fit and lean and managed accordingly

A rising plane of nutrition over the "Golden 20 day" period (10 days either side of service) combined with minimal stress and optimal nutrition in the 1st 50 days following mating will allow for maximum ovulation rates (twins vs. singles) and reduce early embryo loss.

It is highly recommended to conduct mineral sampling of the ewe flock prior to tupping. Minerals such as selenium and vitamin E are crucial to reproductive function, whilst Copper and Iodine are needed to develop a healthy lamb. Act now to allow time for supplements to take effect. Blood sampling is quick to carry out – contact us to arrange

Fluke and worm sampling/ treatment should be carried out.

Physical examination of the udder, teeth and feet should be conducted in good time before mating.

Vaccination against Enzootic abortion and Toxoplasmosis is recommended and needs to be completed at least 4 weeks and 3 weeks prior to mating respectively. It is worth noting that the datasheet mentions the duration of immunity from Toxovax is around 2 years and Enzovax around 4 years, so in older flocks, re-vaccination may be required.

New for 2021: Ram Health Check

Book in now for your on farm ram health check, including:

- \checkmark Tup examination and MOT,
- √ Discuss flock health,
- √ Worm egg count
- √ Blood sampling as required (lab testing at cost)

