

LIVER FLUKE A GUIDE TO TEST-BASED CONTROL

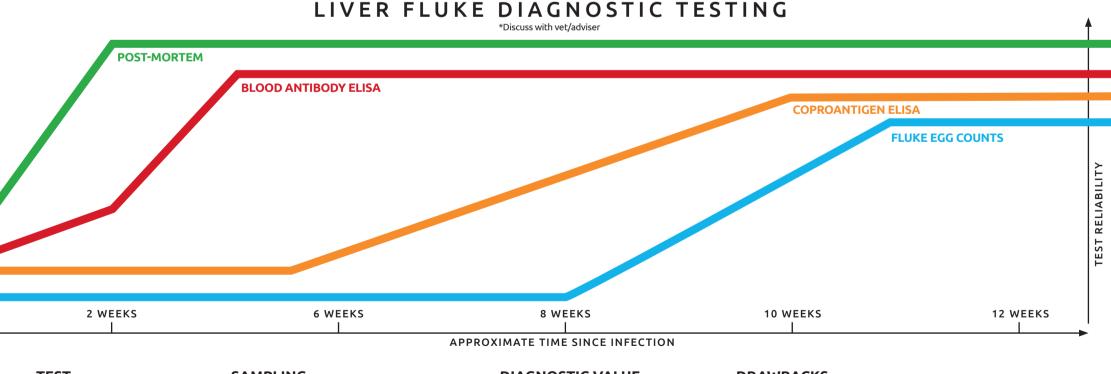


www.cattleparasites.org.uk This chart is based on SCOPS and COWS principles of Best Practice. Go to the websites for more information.

www.scops.org.uk

SPRING/EARLY SUMMER LATE SUMMER / AUTUMN WINTER **ACUTE DISEASE RISK PERIOD CHRONIC DISEASE RISK PERIOD** (exact start of risk period farm/weather dependent) (exact start of risk period farm/weather dependent) **REGULAR (E.G. MONTHLY) BLOOD FAECAL TESTING ANTIBODY TESTING** Youngstock and older animals First season lambs and calves Coproantigen ELISA (individual samples) • 10 sentinel animals per risk group Fluke egg counts (individual & composite samples) • Delay treatment until positive results • Where negative, repeat test in 4-8 weeks indicate active infection **NEGATIVE POSITIVE POSITIVE POSITIVE NEGATIVE ACUTE FLUKE RISK IDENTIFIED CHRONIC FLUKE RISK IDENTIFIED** • For Infections later in the season avoid using triclabendazole • Treat with triclabendazole • Consider closantel, albendazole or oxyclozanide later into the chronic risk and/or housing period • Consider follow-up coproantigen and/or fluke egg • Where resistance status is unknown, consider a post treatment coproantigen check or a fluke egg count counts testing for chronic infection later in the season reduction test (discuss with your vet/adviser. if resistance is suspected visit SCOPS/COWS for a guidance) · Alternatively, where fluke risk is low, consider delayed dosing (e.g. post-housing) with closantel* Consider additional coproantigen/ fluke egg counts 2-3 months post-treatment in case of any juvenile fluke infection at time of treatment. **POSITIVE** POST-MORTEM (INCLUDING ABATTOIR RETURNS) Treatment informed by stage and severity of disease identified

^{*} If a second dose of closantel is advised, 6 weeks is the minimum interval to avoid toxicity issues



TEST	SAMPLING	DIAGNOSTIC VALUE	DRAWBACKS
BLOOD ANTIBODY ELISA	Regular blood sampling. Use first season grazing animals (lambs and/or calves) as "sentinels". 10 animals per risk group (consider on-farm risks eg. grazing).	Measure of acute disease risk. Increasing antibody levels identify when active infection is occurring for targeted treatment.	Careful test interpretation is required to avoid premature treatment. Test results for sentinel animals indicate risk status for their group only. Antibody levels can remain high even after successful treatment and in previously exposed older aniamls.
COPROANTIGEN ELISA	Dung, individual (avoid using pooled if possible).	Mid- to late stage infection.	Low sensitivity in cattle and in pooled samples. If result negative, advise re-test in ~4 weeks.
FLUKE EGG COUNTS	Dung, individual and pooled.	Definitive diagnosis when adult parasites present.	Test sensitivity may be low, especially in cattle. If result negative, advise re-test in 4-8 weeks
POST-MORTEM	Fallen stock	Definitive diagnosis (all stages of infection).	Abattoir returns are useful, but should not be considered equivalent to veterinary post-mortem in terms of reliability.