LIVER FLUKE
A GUIDE TO TEST-BASED CONTROL

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

www.cattleparasites.org.uk
www.scops.org.uk

LATE SUMMER / AUTUMN

ACUTE DISEASE RISK PERIOD
(exact start of risk period farm/weather dependent)

REGULAR (E.G. MONTHLY) BLOOD ANTIBODY TESTING
• First season lambs and calves
• 10 sentinel animals per risk group
• Delay treatment until positive results indicate active infection

NEGATIVE  POSITIVE

ACUTE FLUKE RISK IDENTIFIED
• Treat with triclabendazole
• Consider follow-up coproantigen and/or fluke egg counts testing for chronic infection later in the season
• Alternatively, where fluke risk is low, consider delayed dosing (e.g. post-housing) with closantel*

POST-MORTEM (INCLUDING ABATTOIR RETURNS)
Treatment informed by stage and severity of disease identified

WINTER

CHRONIC DISEASE RISK PERIOD
(exact start of risk period farm/weather dependent)

FAECAL TESTING
• Youngstock and older animals
• Coproantigen ELISA (individual samples)
• Fluke egg counts (individual & composite samples)
• Where negative, repeat test in 4-8 weeks

POSITIVE  POSITIVE  NEGATIVE

CHRONIC FLUKE RISK IDENTIFIED
• For infections later in the season avoid using triclabendazole
• Consider closantel, albendazole or oxyclozanide later into the chronic risk and/or housing period
• Where resistance status is unknown, consider a post treatment coproantigen check or a fluke egg count reduction test (discuss with your vet/adviser; if resistance is suspected visit SCOPS/COWS for a guidance)
• Consider additional coproantigen/ fluke egg counts 2-3 months post-treatment in case of any juvenile fluke infection at time of treatment.

SPRING/EARLY SUMMER

POSITIVE

LIVER FLUKE DIAGNOSTIC TESTING
*Discuss with vet/adviser

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 e.g. 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 animals.

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.

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

2 WEEKS  6 WEEKS  8 WEEKS  10 WEEKS  12 WEEKS

www.scops.org.uk