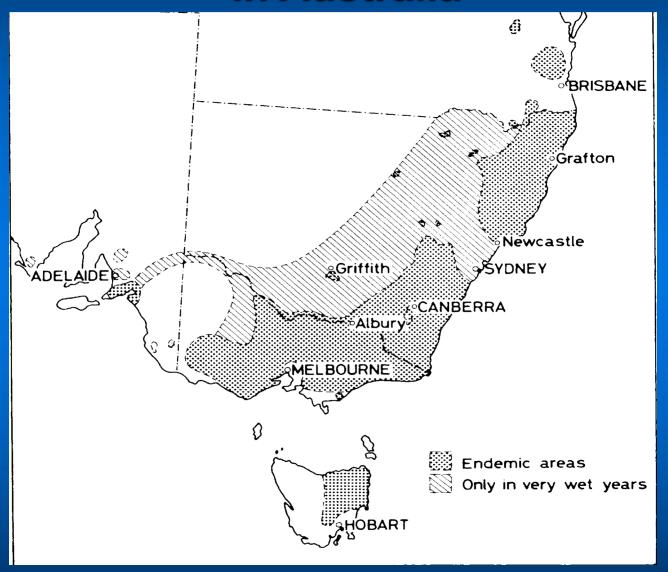


Disease and Wool Production: Liver Fluke

Produced for the CRC for Premium Quality Wool undergraduate program by; Dr. Steve Walkden-Brown and Dr. Brad Crook, The University of New England.

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Distribution of Fasciola hepatica in Australia





Lifecycle of Fasciola hepatica

The metacercariae break down within the sheep's intestines, and the immature fluke which emerge migrate to the bile ducts in the liver. Development to maturity takes 10 weeks.

Mature liver fluke produce thousands of liver fluke eggs. These pass out in the sheep's faeces.

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If temperatures are warm and there is moisture on the ground, the eggs hatch to produce miracidia.



The miracidia swim until they find and burrow into a Lymnea tomentosa snail.

SUMMER

SPRING



Within a snail, each miracidium develops into hundreds of cercariae.

The cercaria leave the snail, attach to grass blades, and form cysts around themselves.

The cysts are known as metacercariae.



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AUTUMN/WINTER



Sheep become infected by grazing pasture which contains metacercariae.

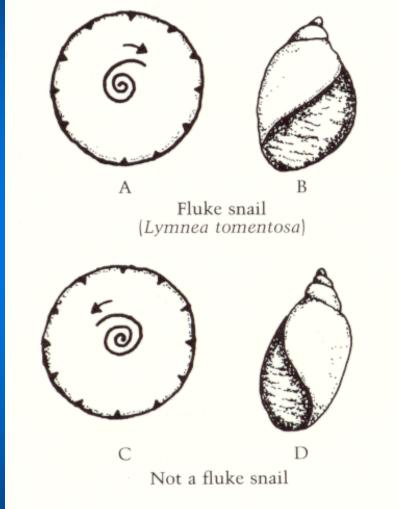


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Liver fluke (Fasciola hepatica)

Fluke snail (Lymnea tomentosa)







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Black disease.
Bacterial disease associated with larval migration through liver.
Rapidly fatal.

Chronic liver fluke infection.

Liver is cirrhotic (fibrous), pale and shrunken.





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Reduction in greasy fleece weights following infection with 100, 500 or 1000 metacercariae.

