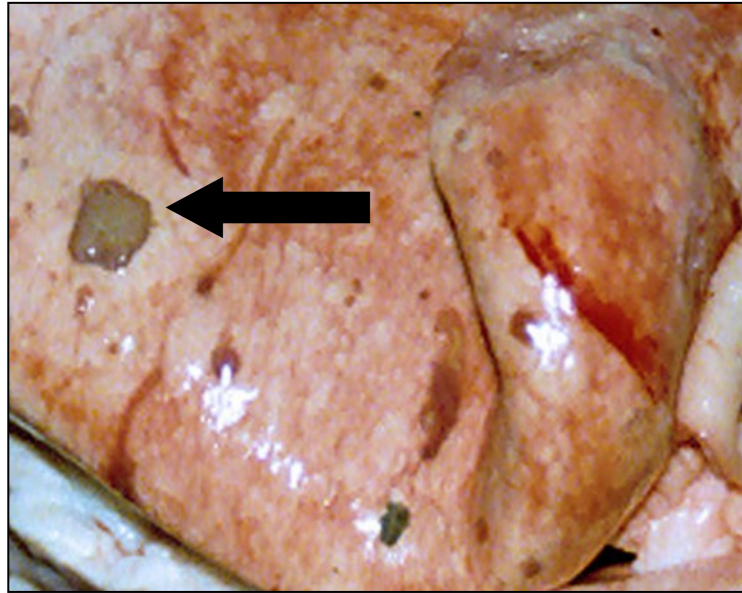
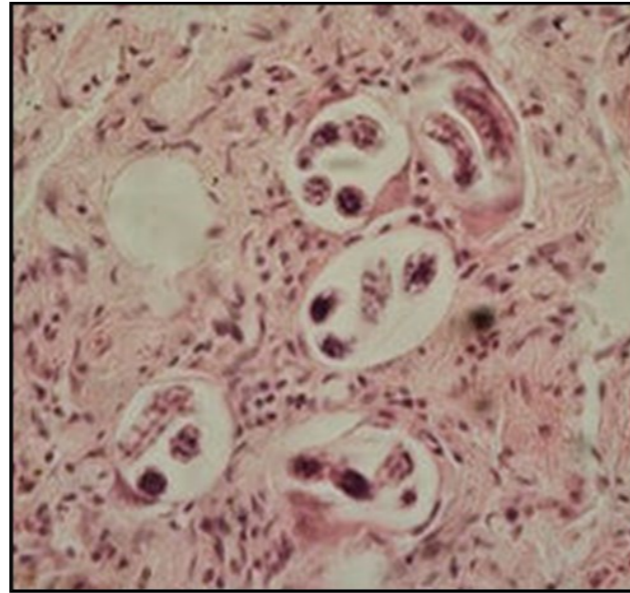


The Life cycle of the Cat lungworm *Aelurostrongylus abstrusus*

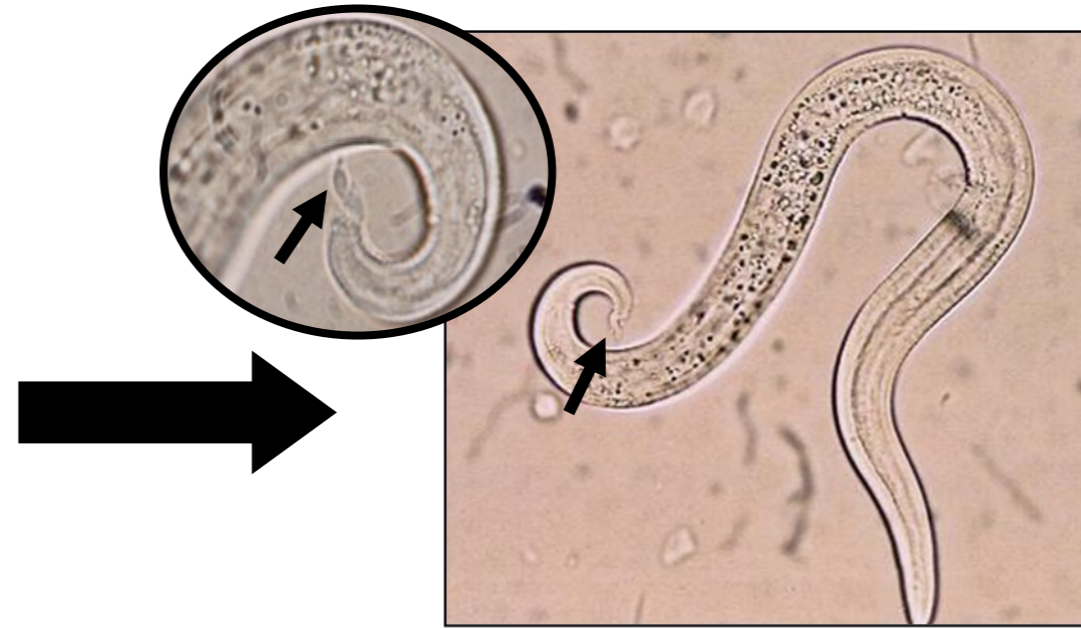
Aelurostrongylus abstrusus reside in the lung parenchyma and small bronchioles. The life cycle is indirect with many terrestrial molluscs and paratenic hosts involved. This worm in general has a low pathogenicity.



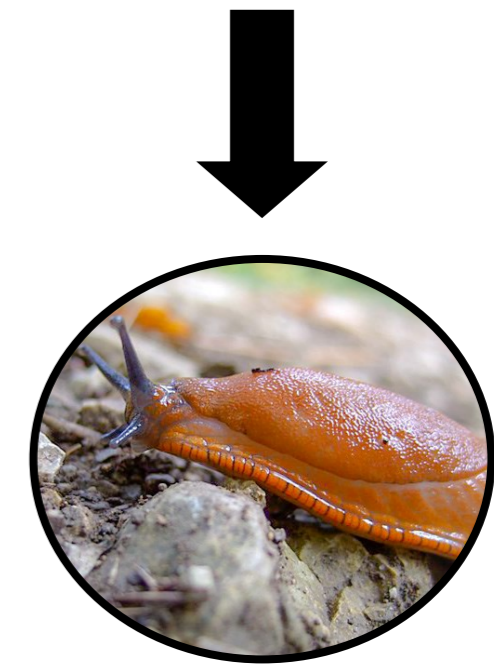
1. The adult worms live in the lung tissues and appear grossly as multiple small, greyish subpleural areas, or sometimes larger granulomas with many worms are present. In severe infections, as shown above, larger coalesced nodules, up to 1cm in diameter, project from the lung surface.



2. The worms are ovo-viviparous: eggs hatch quickly to first stage larvae, aggregations of which may be present throughout the lung tissue, as shown above in a stained histological section.

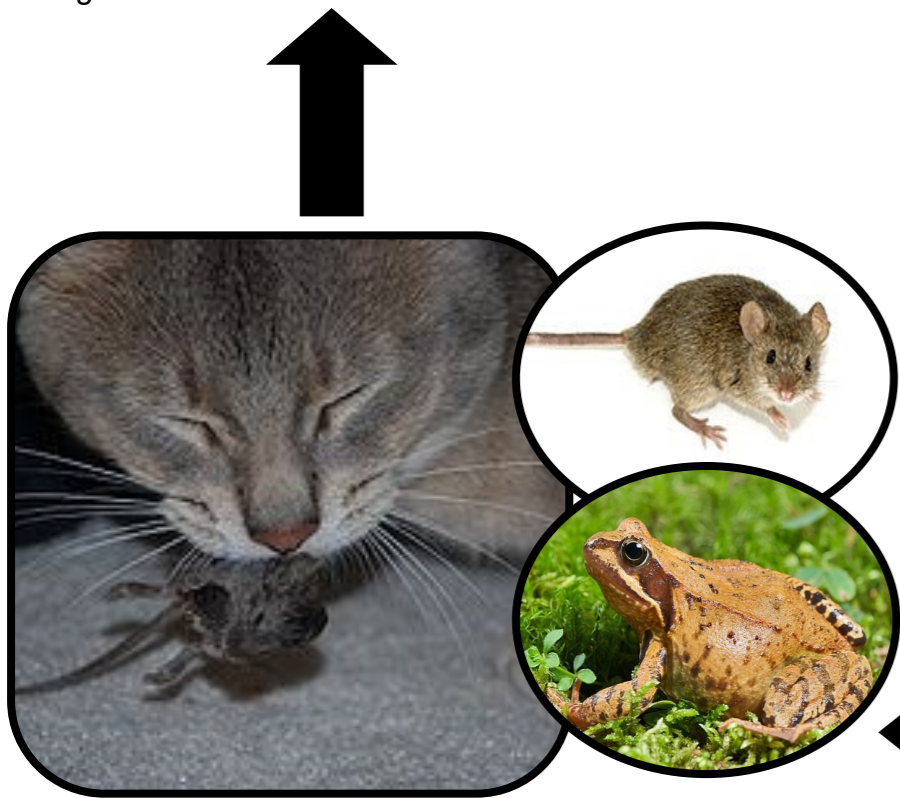


3. The L1 migrate to the airways and are coughed up and swallowed, and appear in the faeces. They measure approx. 350µm in size, and have a very distinctive wavy tail (arrow).



4. Slugs and other detritivorous molluscs attracted to faeces are penetrated by the L1 stage which develops to the second stage and finally the third stage larva (L3) which is infective to other cats. New Infections can occur when cats come into contact with infected faeces but this appears to be a relatively minor route of transmission.

SIGNIFICANCE
Infections are likely to be widespread and with a worldwide distribution. *Aelurostrongylus abstrusus* can utilise a wide range of intermediate slug and snail hosts which are available to diverse types of paratenic host. At rest, clinical signs are often minimal and may present as a chronic mild cough, which may increase on exercise. Prevalence of infection in the UK is unclear, but is likely to be high in feral cats.



5. Cats are commonly infected by eating a paratenic host such as a rodent, bird, amphibian or a reptile which has eaten an infected mollusc.

6. Following ingestion of a paratenic host the L3 are released in the intestines and travel to the lungs via the blood stream or lymphatics.