Photo: Elin Cunningham

Lifecycle of *Syngamus trachea* in Choughs

7: The young adults migrate to the trachea from the bronchi where they establish as adults, with the male and female in permanent copulation.



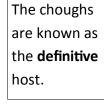
Photo: Stanford University

6: Once in the lungs, the larvae undergo development from L1-L3 (Larval stages) and onto adults.



5: Choughs eat the infected invertebrates, the larvae erupt from the cysts, puncture

through the intestinal mucosa and travel to the lungs through the bloodstream.

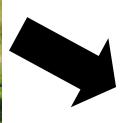




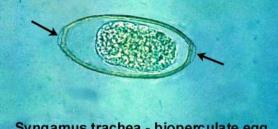


1: Adult worms live in the trachea of the birds and reproduce by sexual reproduction.

Photo: University of Pennsylvania

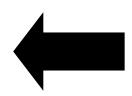


2: Eggs released by the female parasite are coughed up, swallowed by the bird, and appear in the faeces.



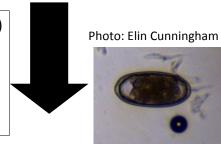
Syngamus trachea - bioperculate egg

4: Infective larvae hatch and become encysted in the muscle tissue of the invertebrates.





The pre-patent period (PPP) is 12-14 days; this is the time it takes from infection for eggs to appear in the faeces.



3: Eggs are eaten by intermediate hosts, including snails, earthworms, and invertebrate larvae.



The invertebrates are known as the intermediate or paratenic hosts.