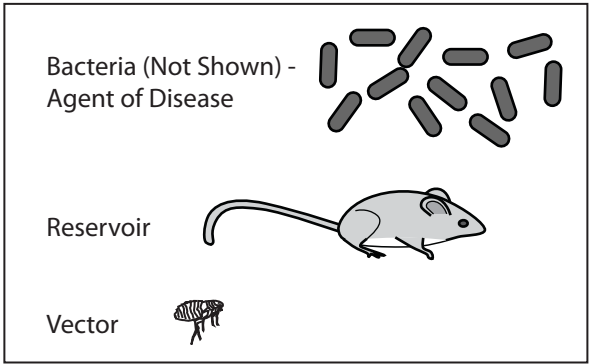
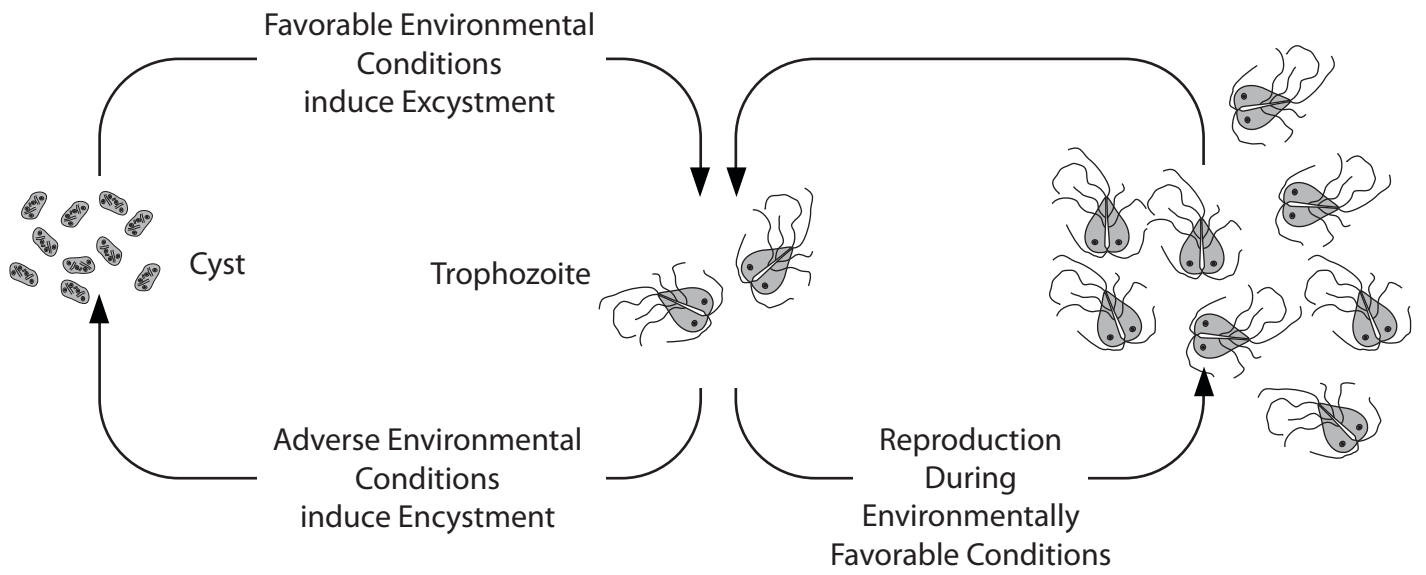


# Eukaryotic Organisms

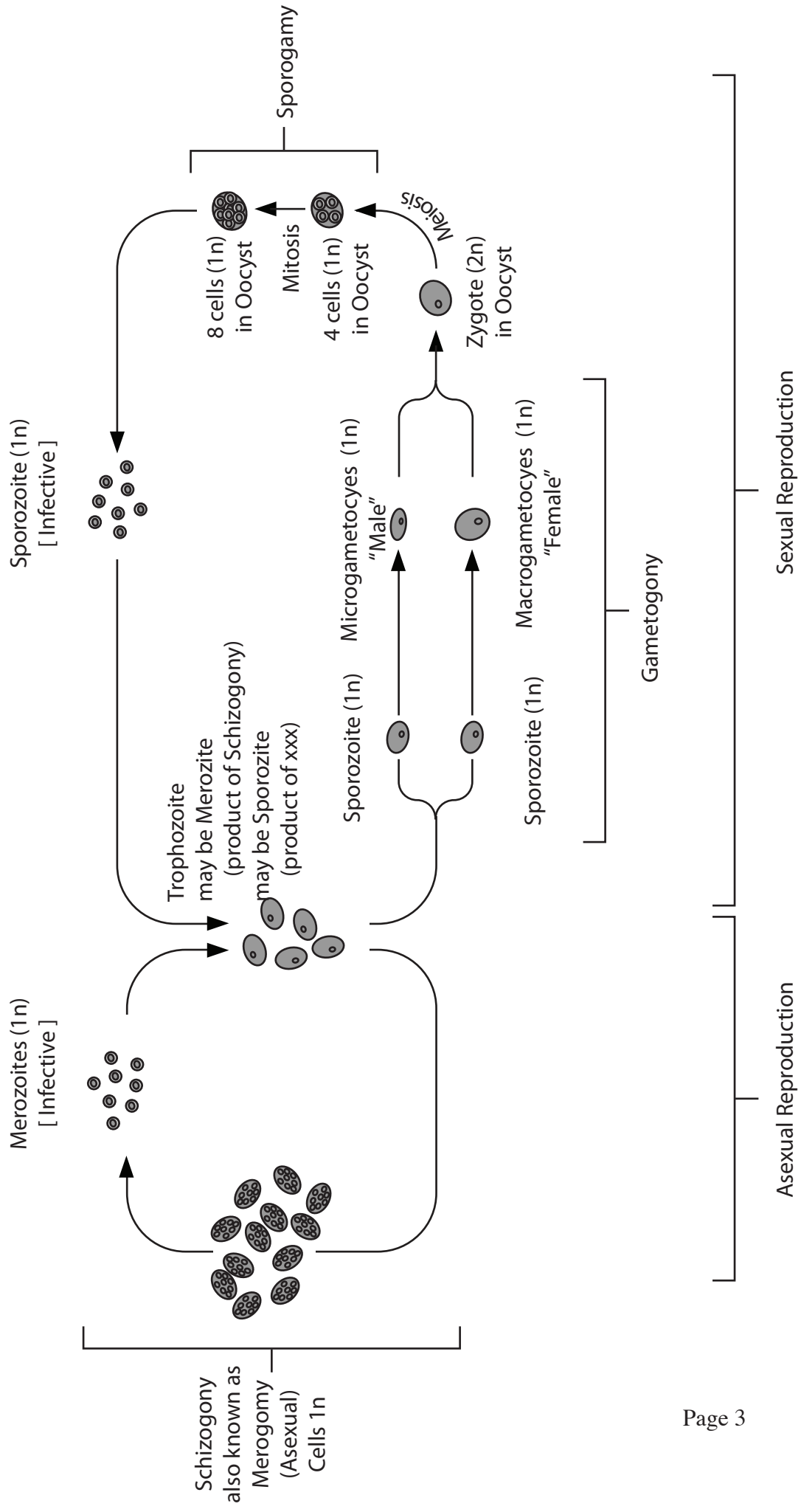
A Pictorial Guide of  
*Supportive Illustrations*  
to accompany  
*Select Topics on Eukaryotic Organisms*



By Noel Ways

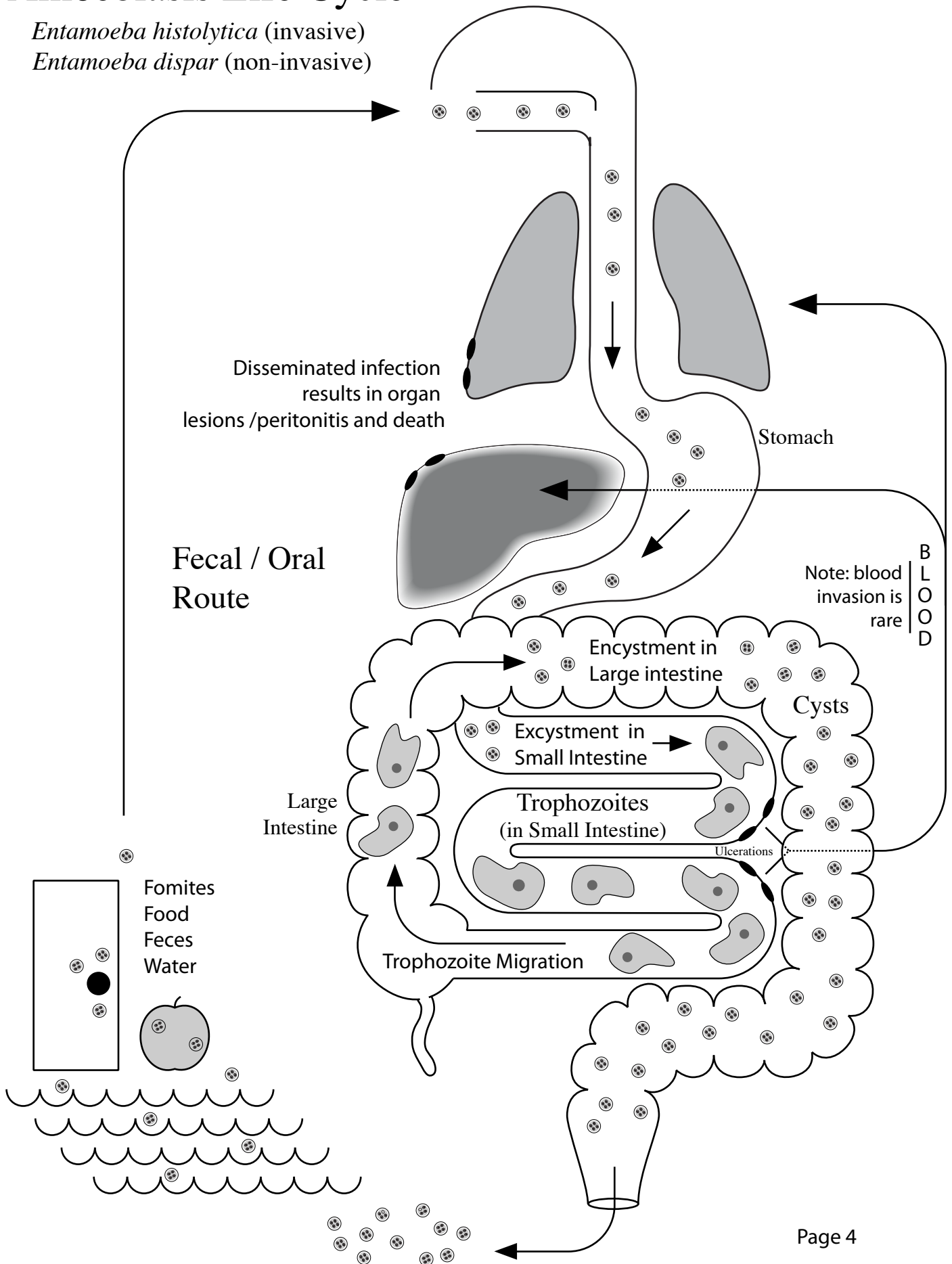


# Generalized Life Cycle Concepts and Terms

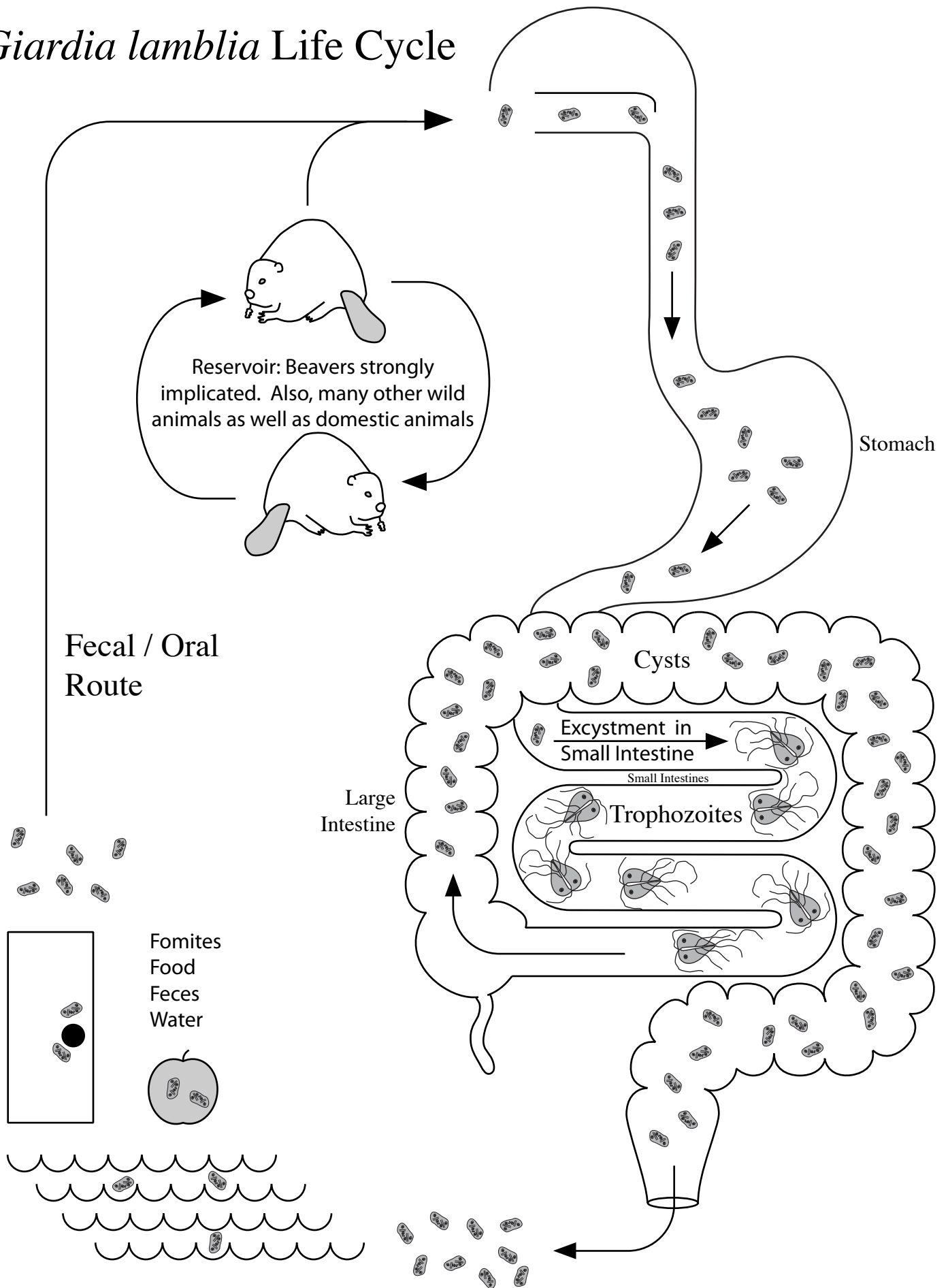


# Amoebiasis Life Cycle

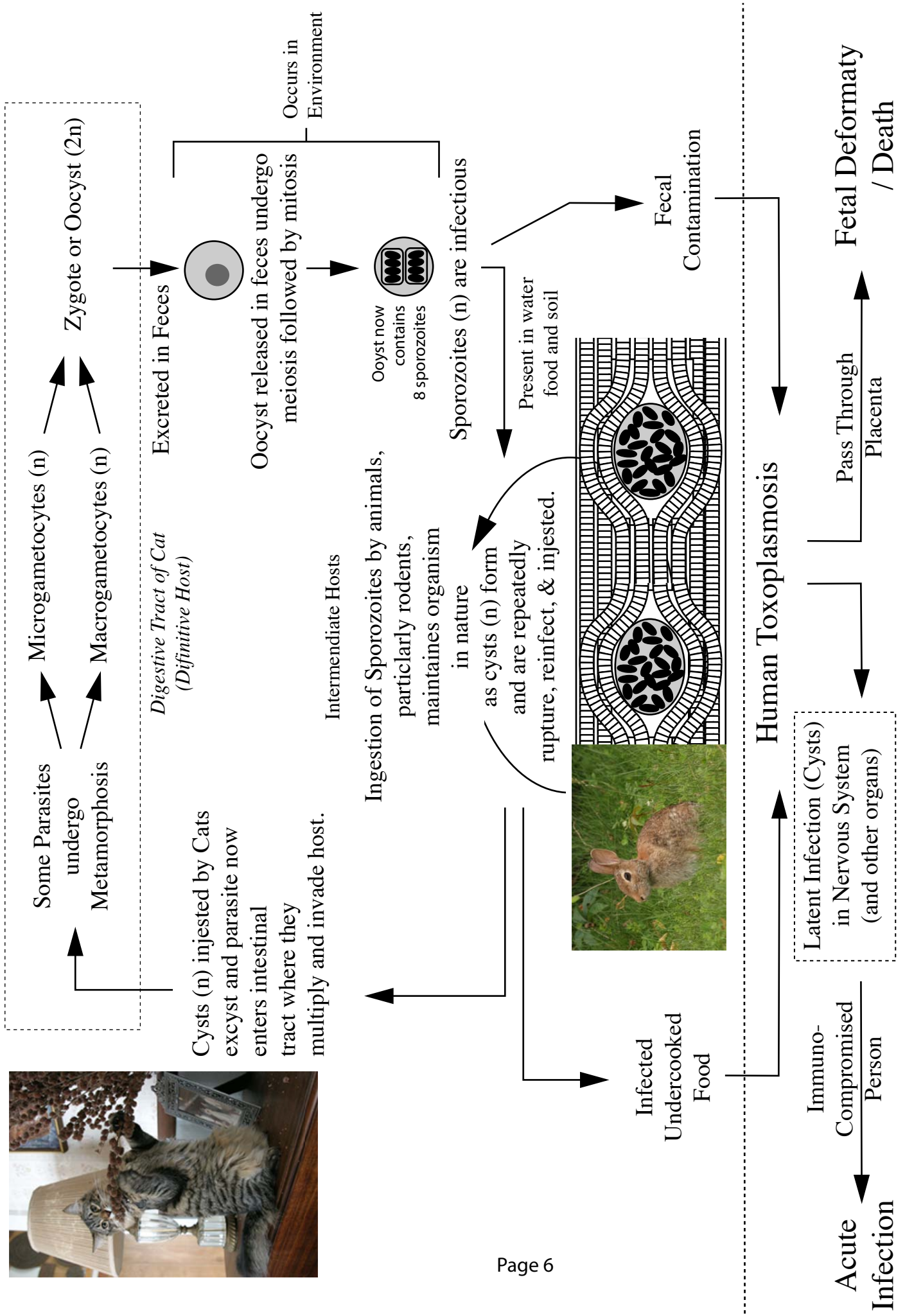
*Entamoeba histolytica* (invasive)  
*Entamoeba dispar* (non-invasive)



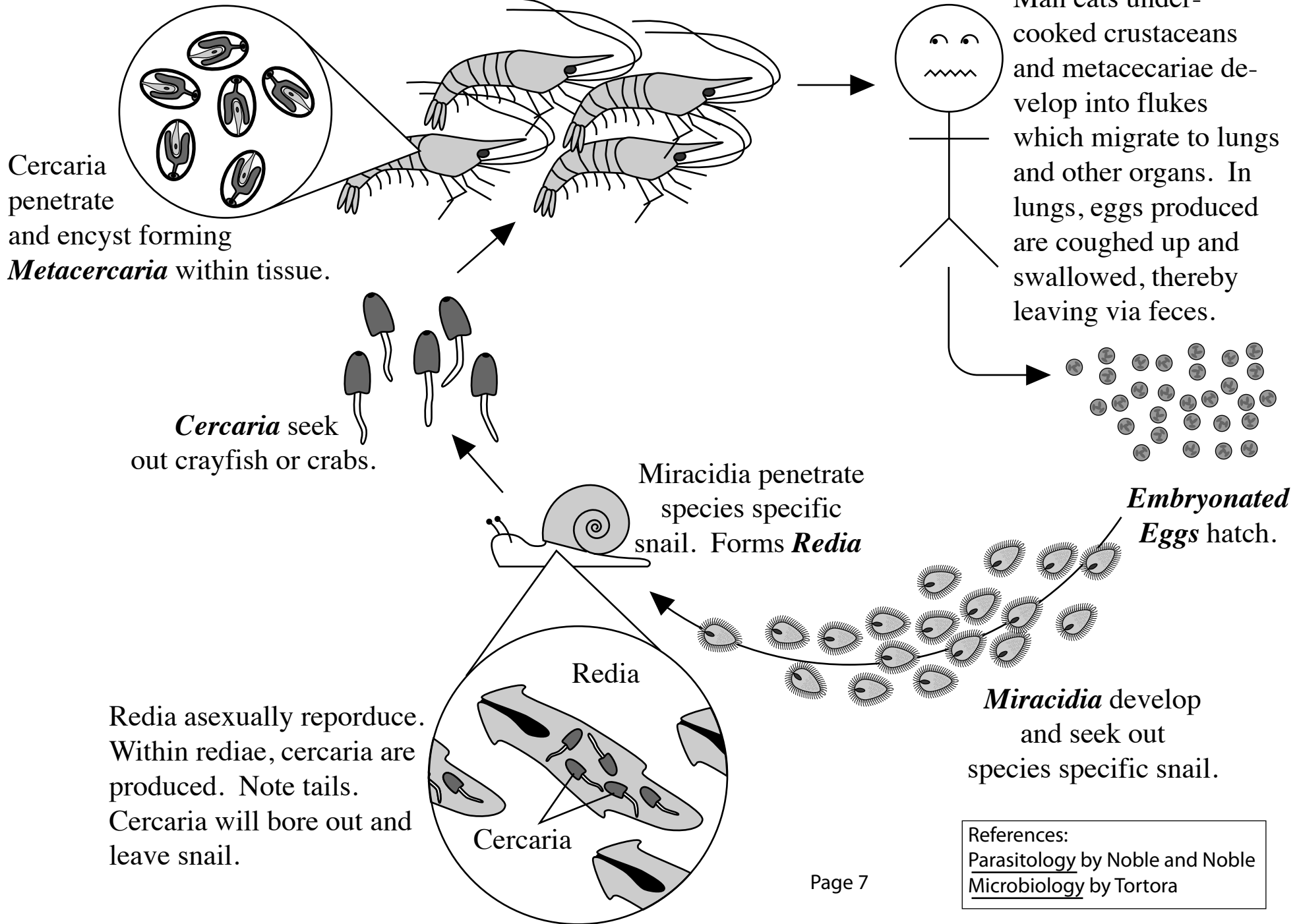
# *Giardia lamblia* Life Cycle



# Toxoplasma gondii Life Cycle

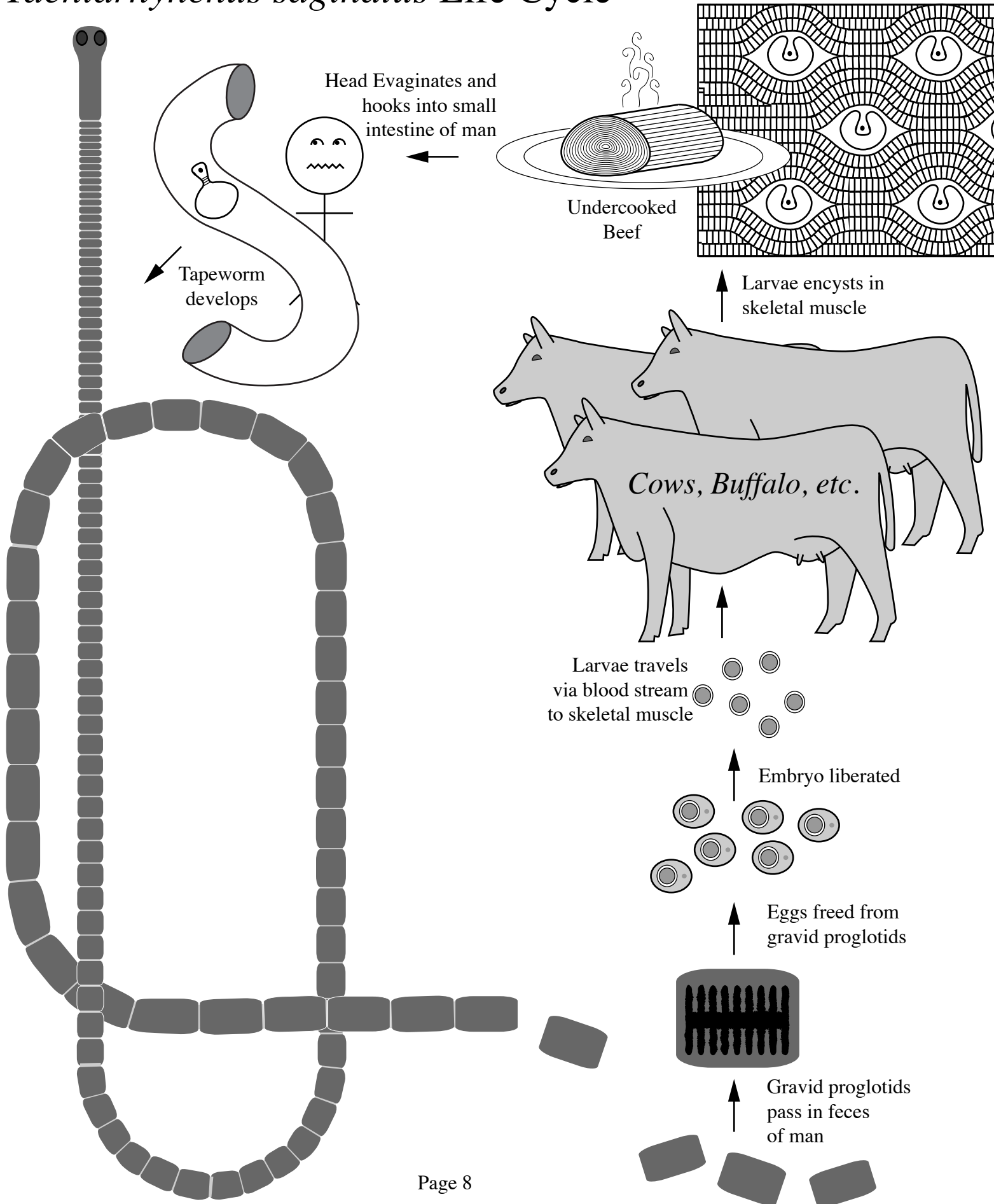


# Paragonimus westermani Life Cycle



References:  
Parasitology by Noble and Noble  
Microbiology by Tortora

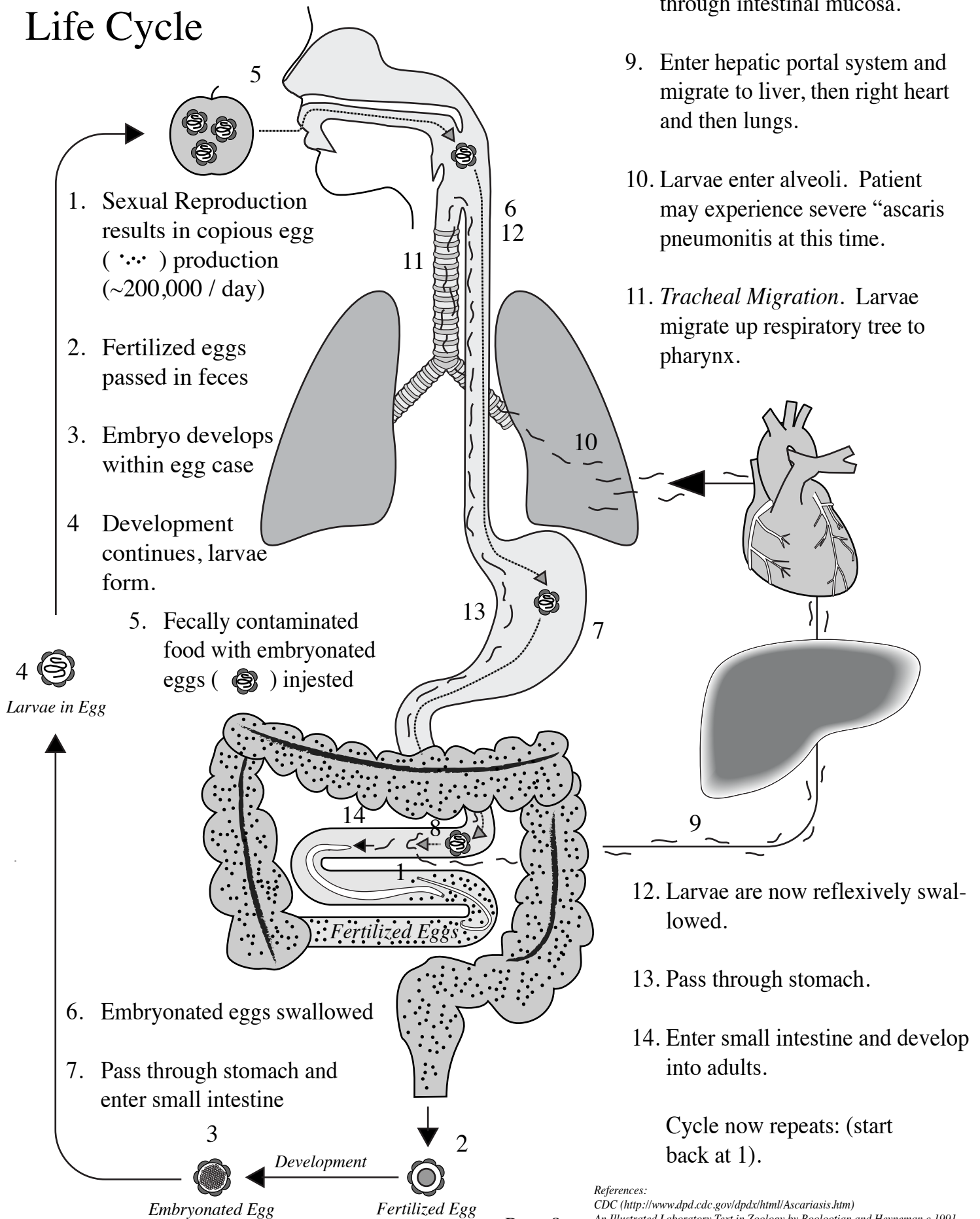
# Taeniarrhynchus saginatus Life Cycle





# *Ascaris lumbricoides*

## Life Cycle



# LIFE CYCLE OF THE DEER TICK

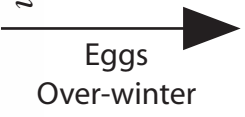
(Vector for *Borelia burgdorferi*, agent of LYME DISEASE)

Eggs are never infected



Spring (Year 1)

Adults preferentially will mate on White Tail Deer or shorty after feeding upon them



Uninfected



Larvae (Six Legged)  
Summer (Year 1)

Infected



Nymph (Eight Legged)  
Fall --> Winter (Year 1)

Small vertebrates, particularly rodents, are "reservoir" for the disease causing agent of Lyme Disease.



Blood Meal Results in Infected Larvae if rodents harbor bacterium

Nymph  
Summer (Year 2)



Blood Meal Results in the inoculation of small vertebrates

Nymph  
Spring (Year 2)



Nymphs Over-winter

Should man inadvertently be fed upon by an infected nymph or adult deer tick, the bacterium of Lyme Disease will be transmitted