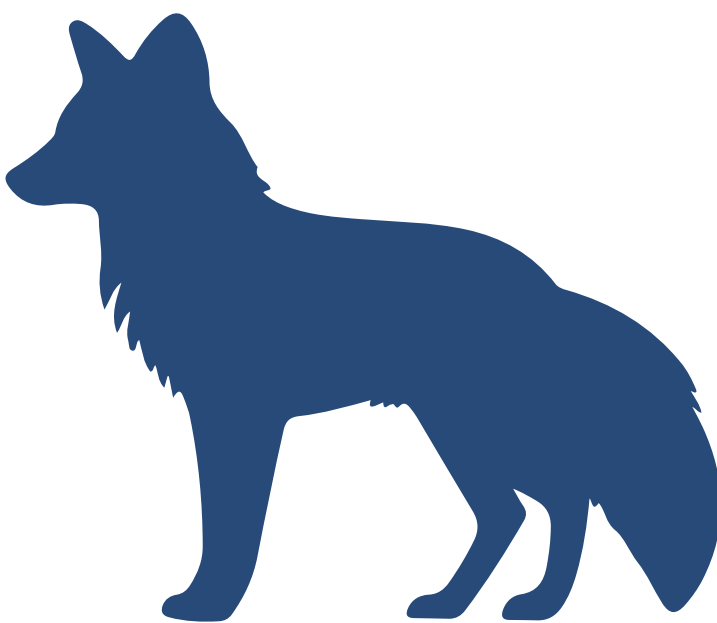


# Exploring the prevalence of lung and heartworms in Nova Scotia foxes

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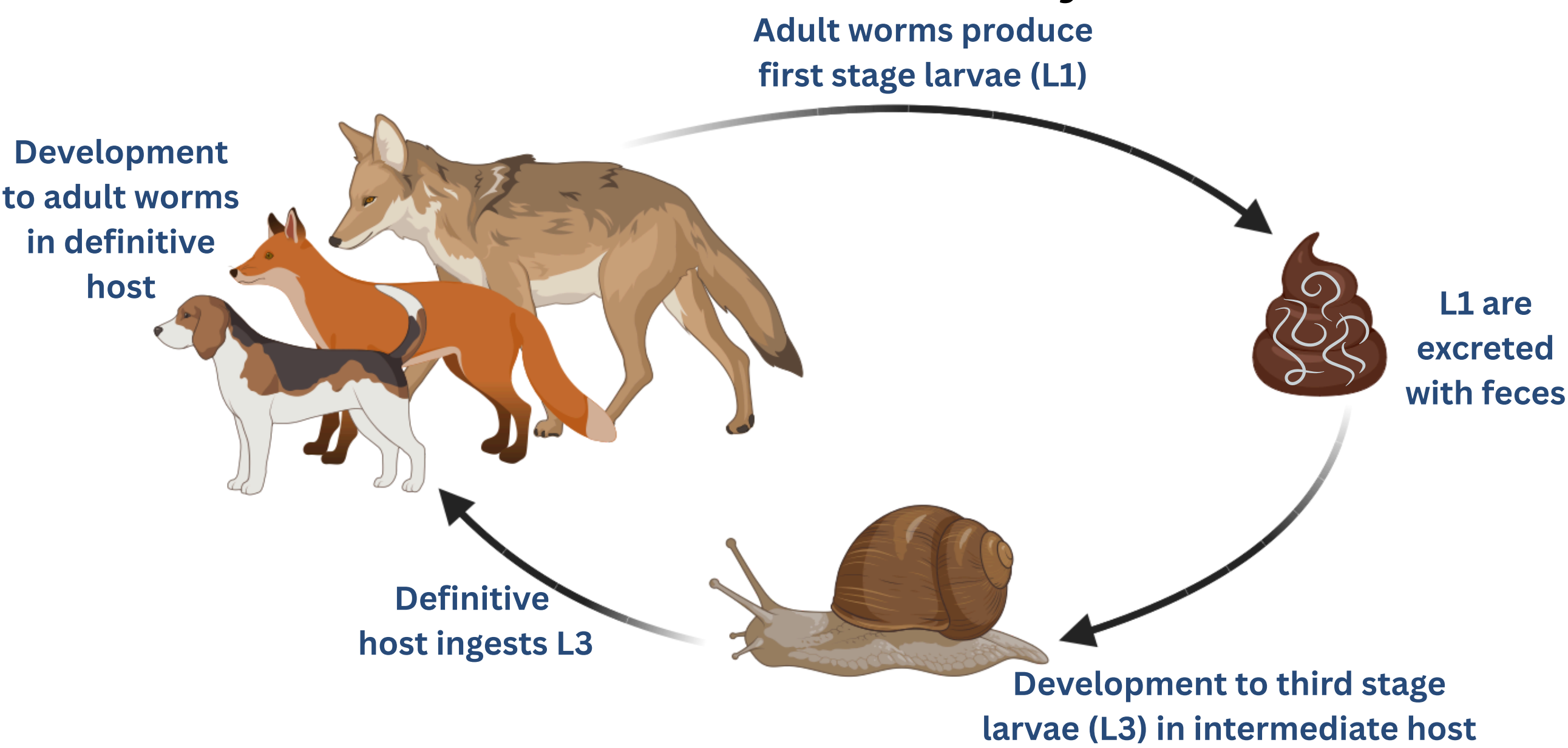


## Highlights

- This is the first report of *Angiostrongylus vasorum* in Nova Scotia foxes, with a prevalence of 40.0%
- *Angiostrongylus vasorum*, *Crenosoma vulpis*, and *Capillaria aerophila* are present in foxes throughout Nova Scotia

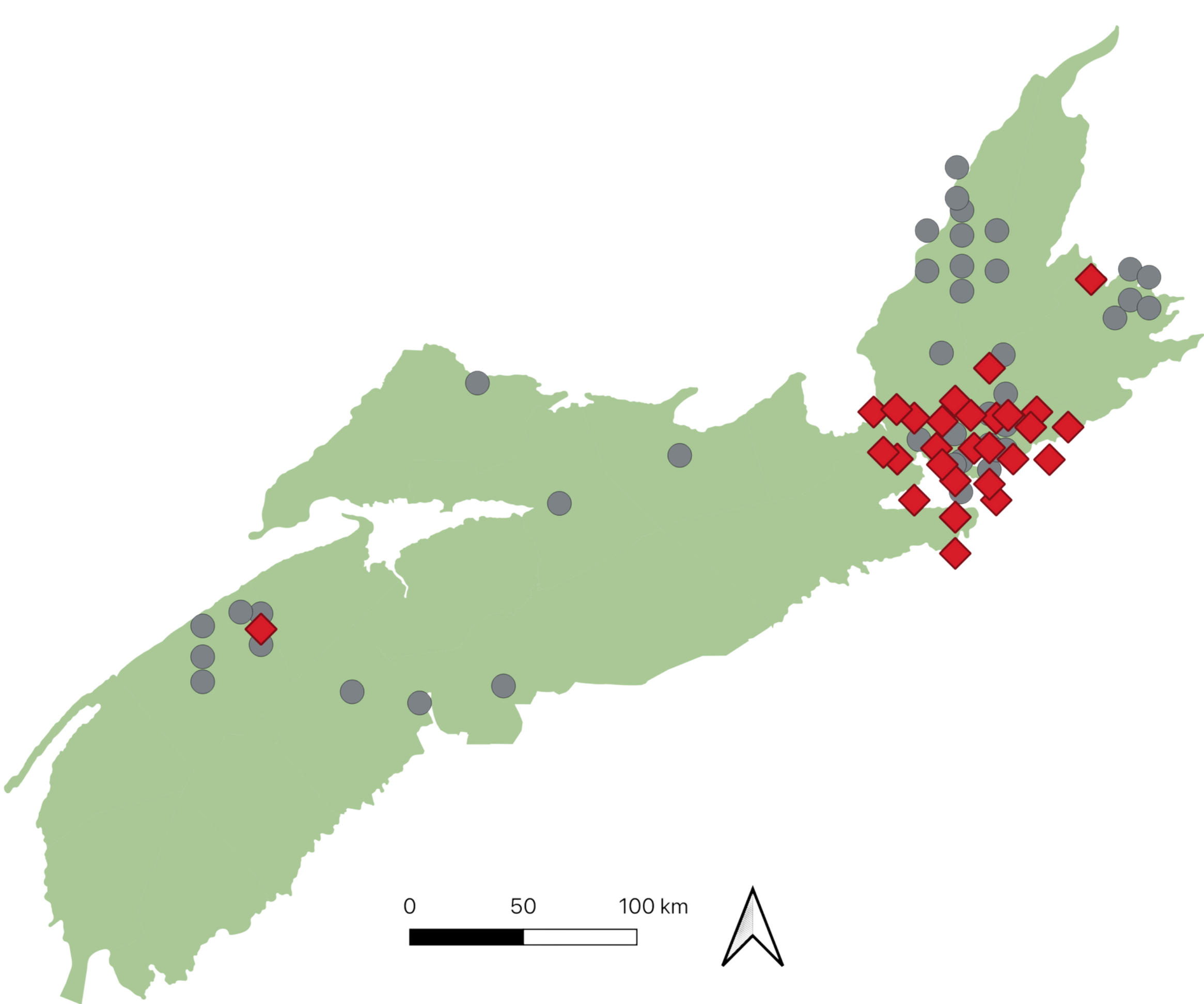
## Introduction

- *Angiostrongylus vasorum*, *Crenosoma vulpis*, and *Capillaria aerophila* are lungworms of canids.
- *C. vulpis* and *C. aerophila* are known to be present in Nova Scotia (NS) foxes<sup>1</sup>.
- *A. vasorum* was first discovered in NS coyotes in 2018<sup>2</sup>.



**Objective: Determine the presence and distribution of lung and heartworms throughout Nova Scotia foxes**

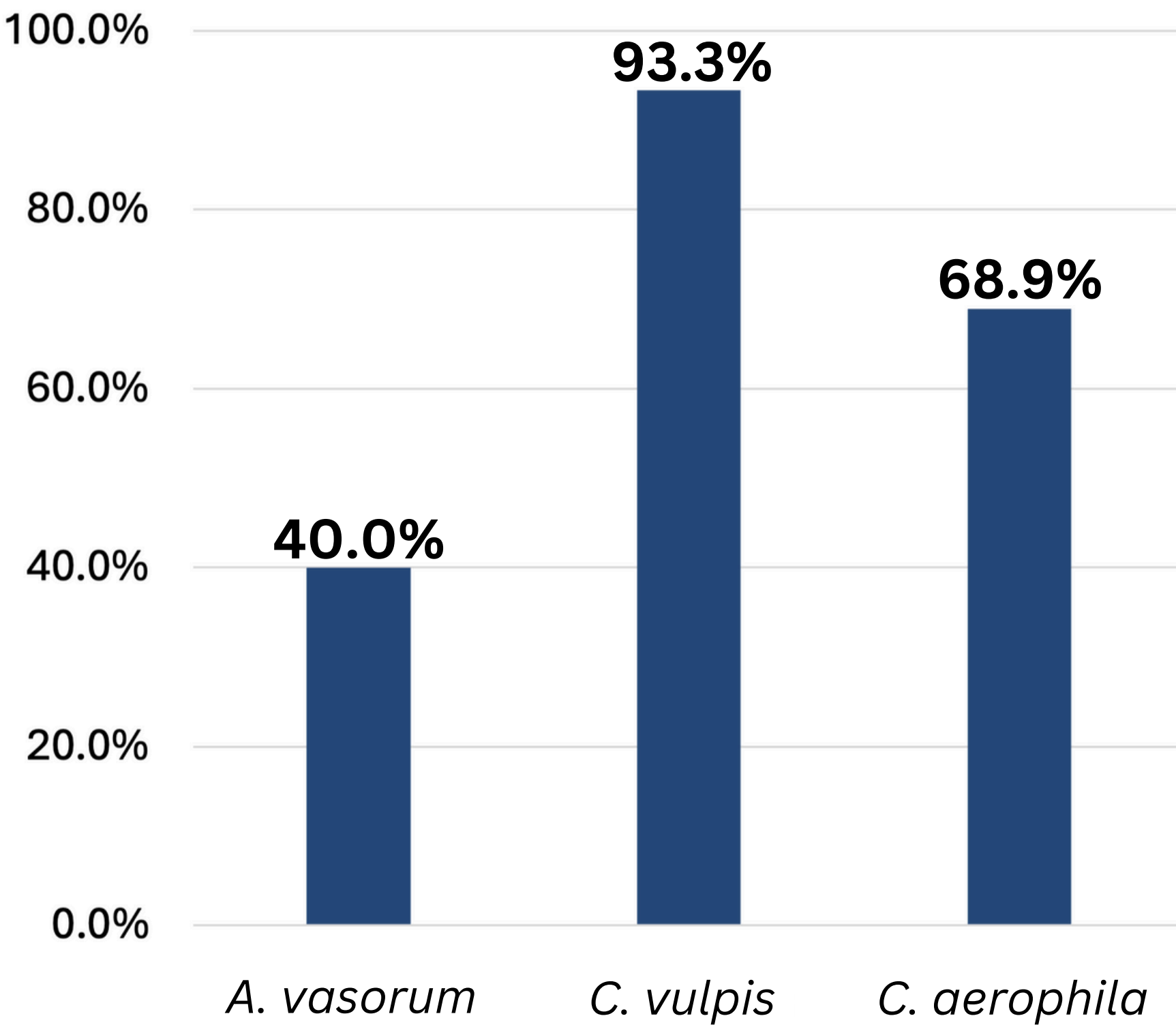
## Results



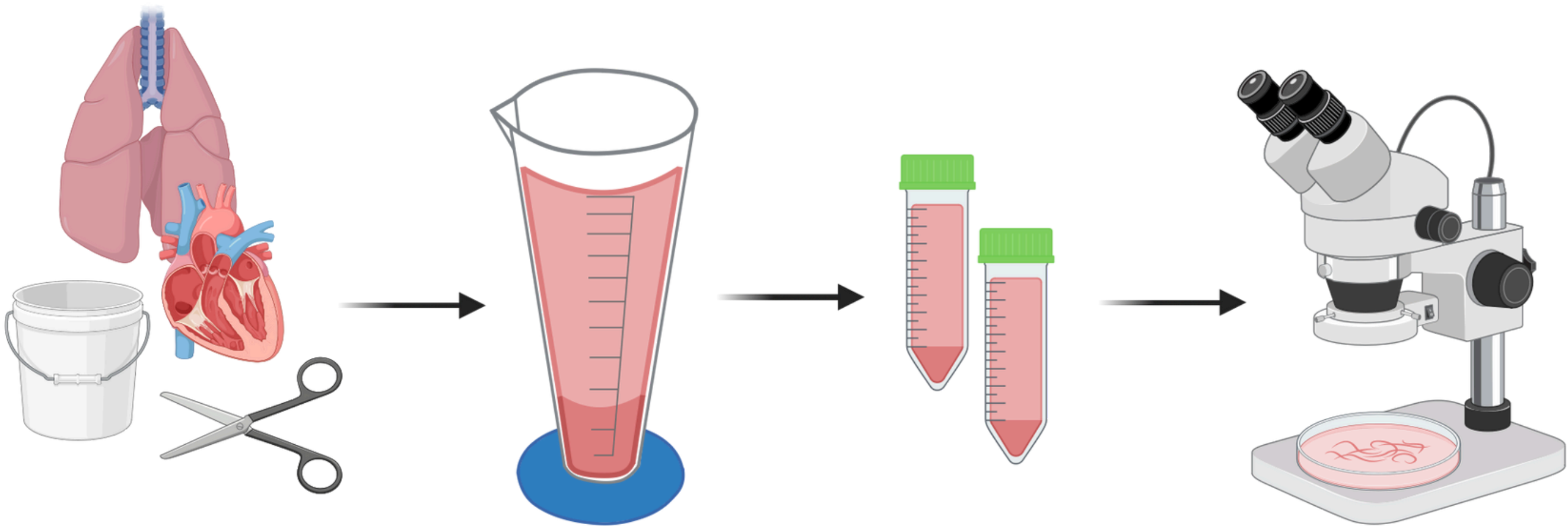
Map of Nova Scotia showing fox samples positive (red diamonds) and negative (grey circles) for *A. vasorum*

**All 90 foxes were infected with at least 1 lungworm species**

**Prevalence of Nova Scotia Foxes Positive for Lungworms (n=90)**



## Methods



- 90 hearts and lungs of Nova Scotia foxes were dissected in a water bath
- Sediment was collected and screened under a dissecting microscope
- Adult worms were identified based on morphology and separated by species and sex<sup>3</sup>

## Discussion

- *Angiostrongylus vasorum*, *Crenosoma vulpis*, and *Capillaria aerophila* are present throughout the Nova Scotia fox population
- *C. vulpis* was the most prevalent, followed by *C. aerophila* and *A. vasorum*, respectively
- This is the first report showing that *A. vasorum* has successfully established in the NS fox population

**Outlook: Continued monitoring of these parasites is crucial to prevent the spread to domestic canids**



## Acknowledgements

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