

The search for *Dirofilaria immitis* and lungworms in Prince Edward Island's wild canids

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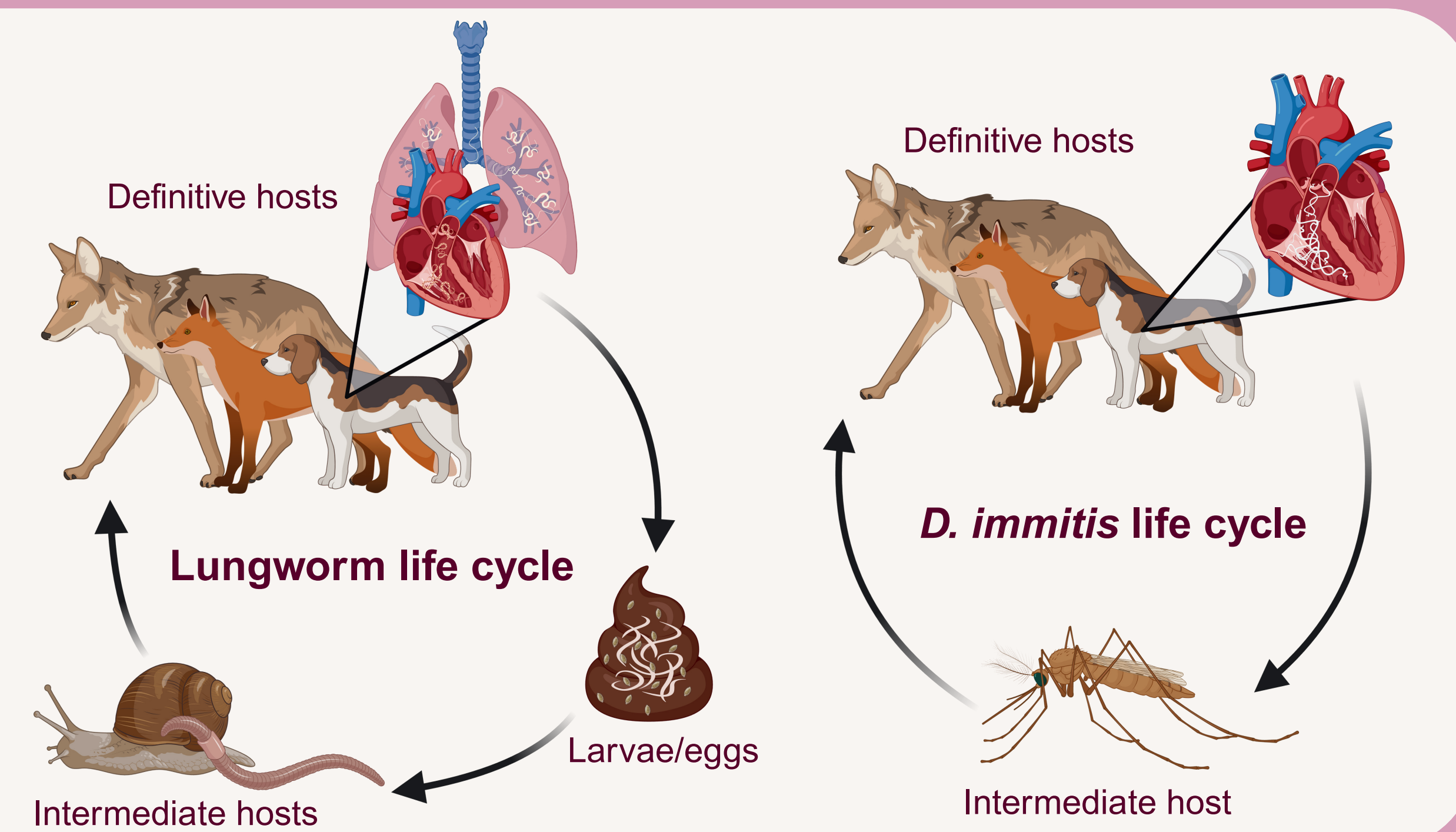
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Highlights

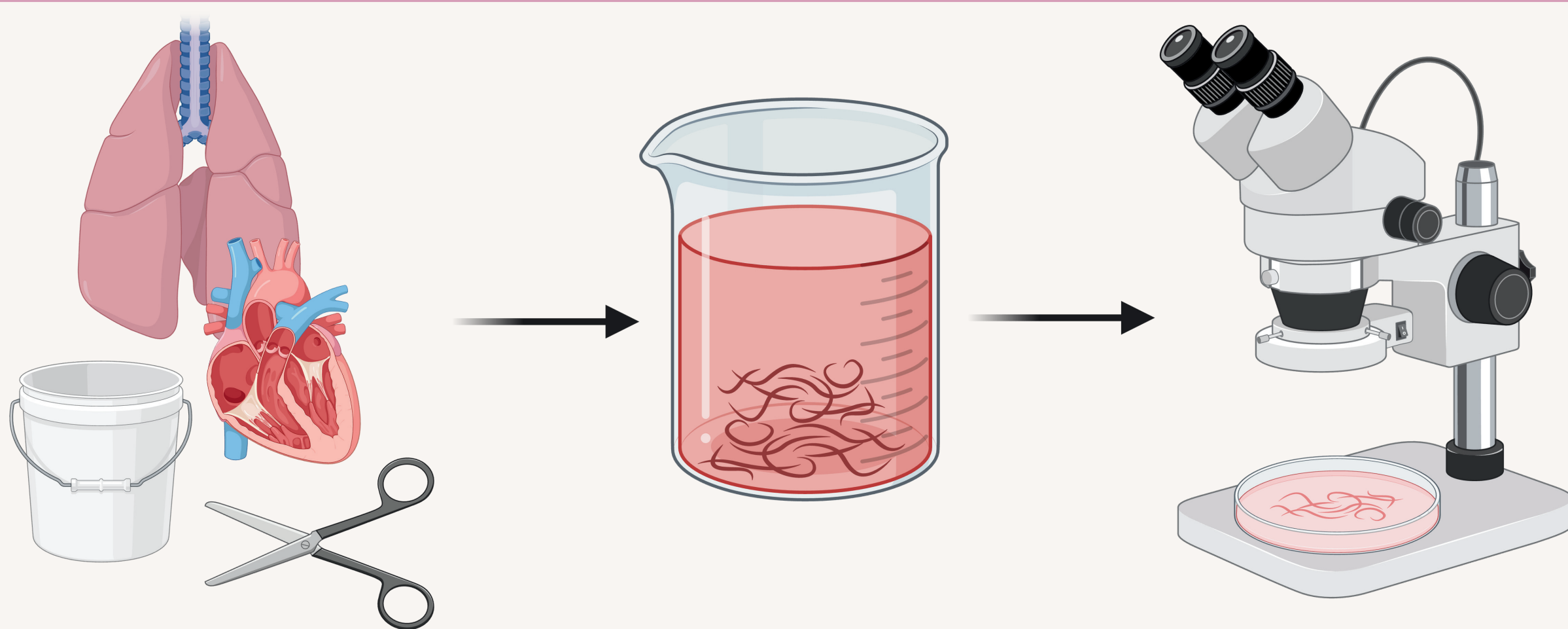
- *Angiostrongylus vasorum*, *Crenosoma vulpis*, and *Capillaria aerophila* are present in foxes and coyotes throughout Prince Edward Island
- *Dirofilaria immitis* was not detected in foxes or coyotes

Introduction

- *Angiostrongylus vasorum*, *Crenosoma vulpis*, and *Capillaria aerophila* are common lungworms of Prince Edward Island (PEI) wild canids
- *Dirofilaria immitis* is a heartworm of canids
- *D. immitis* was found in a PEI coyote for the first time in 2021^{1,2}



Methods

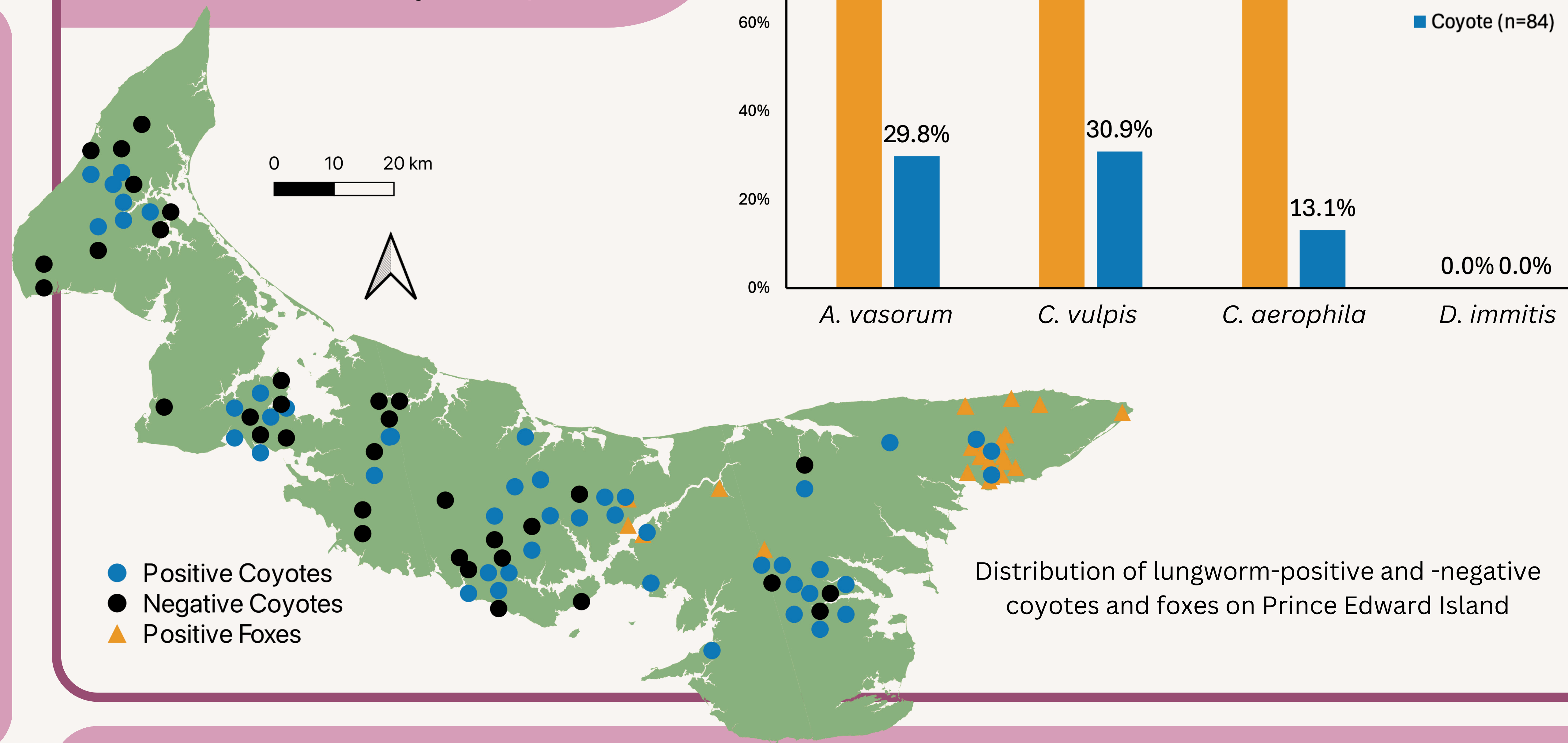


- Hearts and lungs of PEI foxes (n=25) and coyotes (n=84) were dissected in a water bath
- Sediment was collected and screened under a dissecting microscope
- Adult worms were identified based on morphology and separated by species and sex³

Results

All 25 foxes were positive for at least one lungworm species.

57.1% (48/84) of coyotes were infected with at least one lungworm species.



Discussion

- *Angiostrongylus vasorum*, *Crenosoma vulpis*, and *Capillaria aerophila* are well established throughout the Prince Edward Island wild canid population
- Lungworm prevalence in foxes was higher, indicating that they may be important reservoir hosts of these parasites
- *Dirofilaria immitis* was not detected in any fox or coyote samples, suggesting a low prevalence in the population during the study period
- Continued monitoring of wild canids is crucial, as they contribute to the maintenance and transmission of parasites to domestic dogs

Acknowledgements

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References

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2. Mahjoub et al., (2022). CVJ, 63(6), 637–640.
3. Germitsch et al., (2020). Parasitology, 147(10), 1071-1079.