

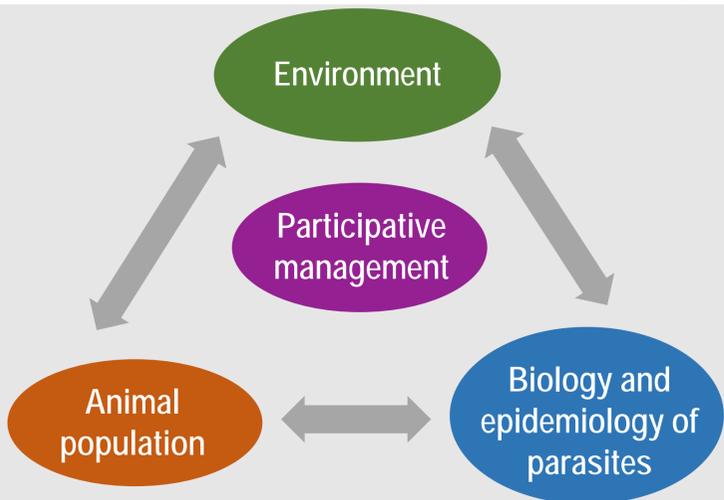
Manipulating winter tick loads to understand how parasites shape moose body condition



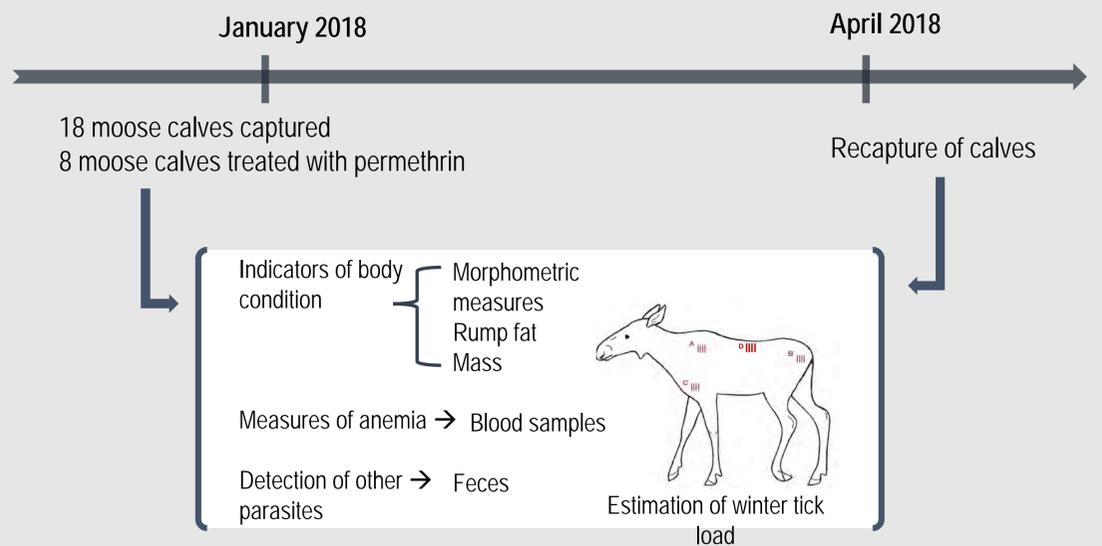
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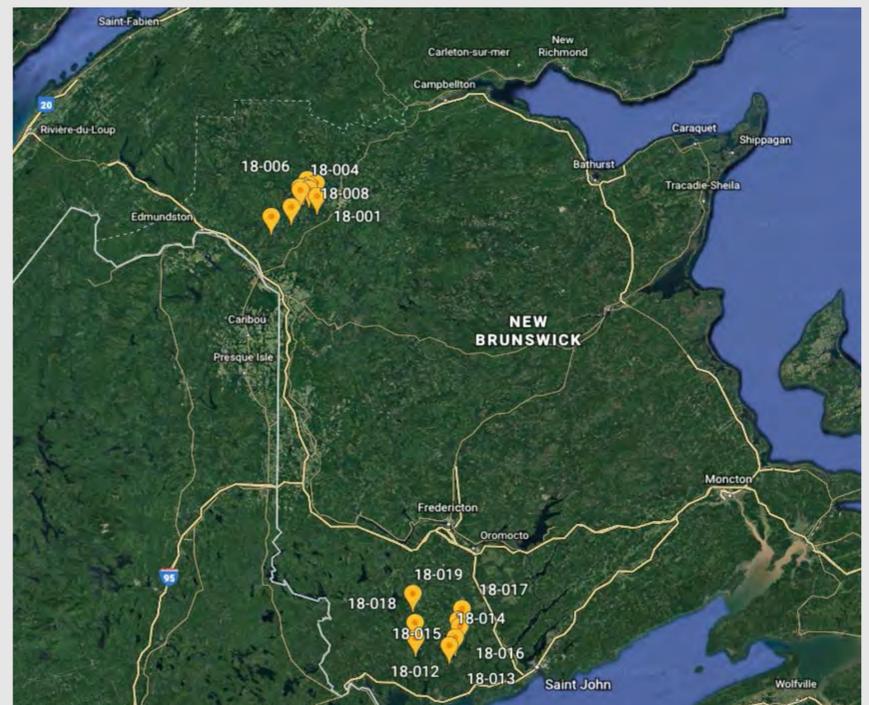
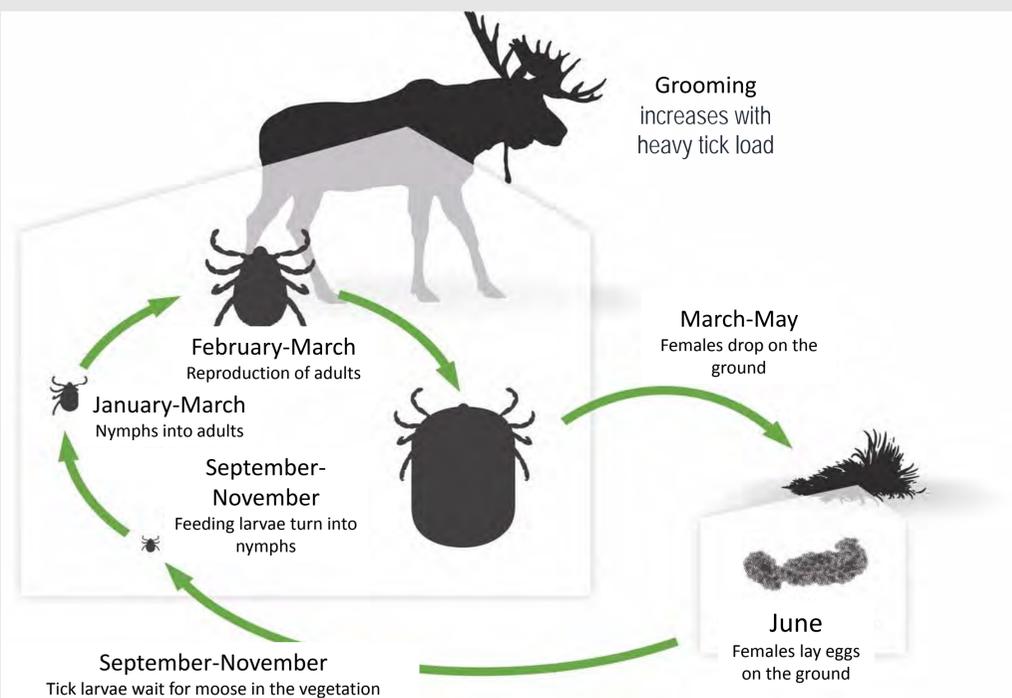
1. The epidemiology of winter ticks modifies moose-tick-habitat interactions under global environmental changes



4. Capture of 18 moose calves in 2 regions with contrasted tick populations

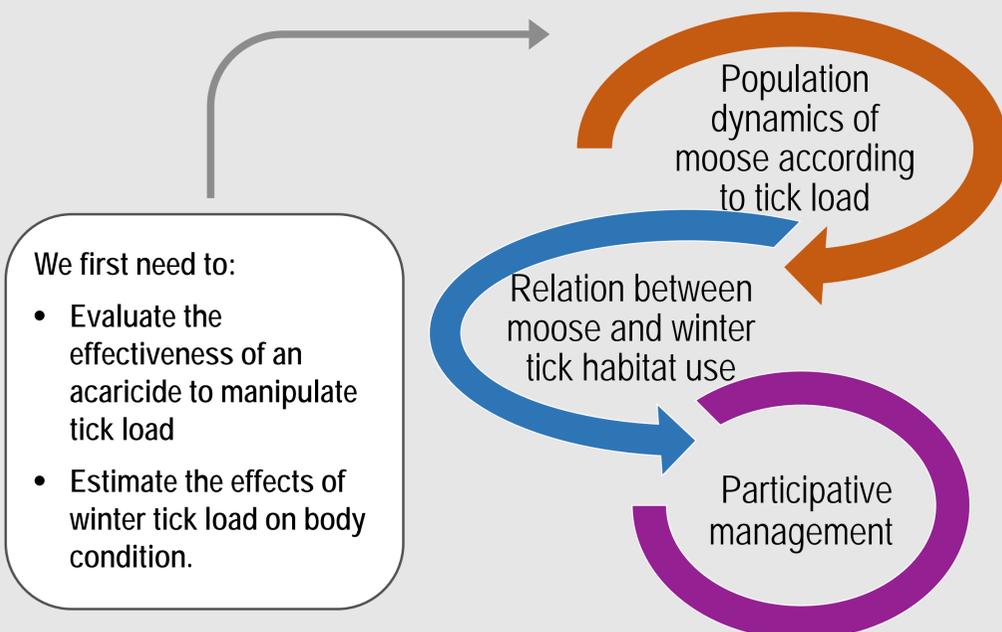


2. The life cycle of winter ticks is closely linked to climate



Locations of the 18 collared moose calves captured in New Brunswick in January 2018

3. The first step of a comprehensive research program



5. Expected results and outcomes

We expect that moose calves with < tick loads will be in > body condition. < tick loads could result from 1) the permethrin treatment, or 2) the region moose live in, because the tick population is smaller in northern New Brunswick.

This study will allow to:

- Determine the relationship between estimated tick loads in late fall/early winter and body condition of moose in spring
- Evaluate the effectiveness of permethrin to manipulate tick load on a large number of moose required to study **population dynamics** and **habitat use**.