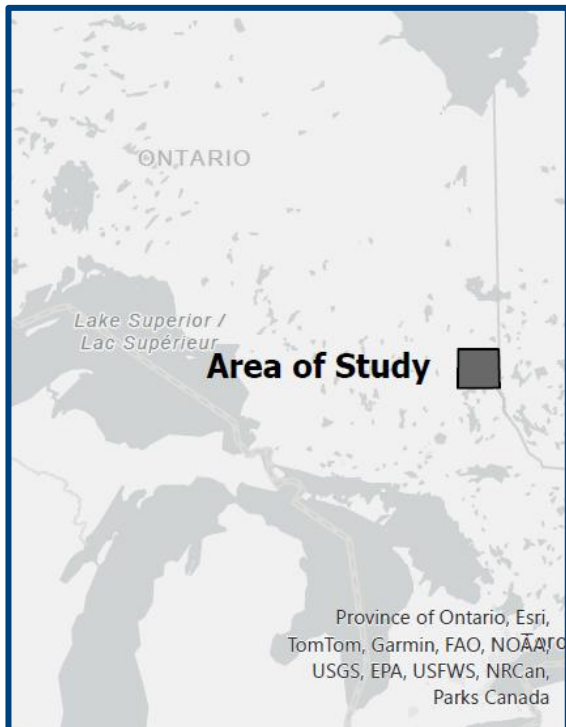


Investigating the effects of land conversion on key soil health indicators and soil organic carbon fractions in Northeastern, Ontario, Canada.



Global warming is expected to create opportunities for a northward expansion of the agricultural frontier in boreal regions, which will require the conversion of forests to agricultural land. Land conversion has been shown to cause declines in soil organic carbon and overall soil health. We look to evaluate these changes, and assess the addition of mulch as a mitigation strategy to prevent losses in soil organic carbon following land conversion.



Field Sampling:

Samples were collected for 4 treatments, across 40 sites near New Liskeard, Ontario.

These sites included <10yr old and >50yr old conventionally cleared agricultural fields, and <10yr old mulched fields. A forest adjacent to each site was sampled as a control.

Soil Health Indicators:

Similar to how a doctor must measure more than just your temperature to determine if you're healthy, there are several indicators we can measure to determine soil health. Some key indicators include: soil organic carbon concentration, aggregate stability, and potentially mineralizable C & N.