



Sampling by depth or by genetic horizon?

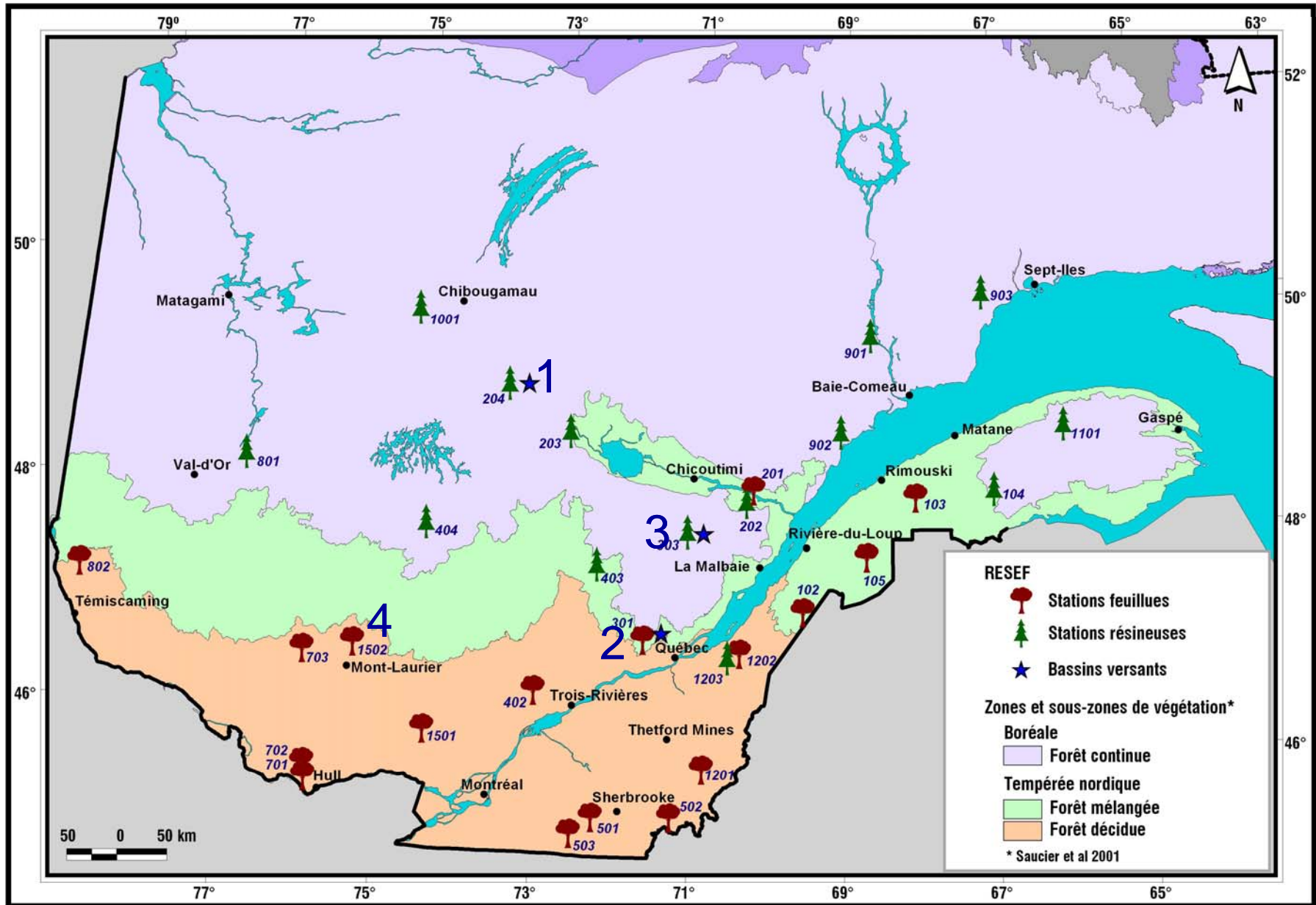
March 2008

Rock Ouimet and
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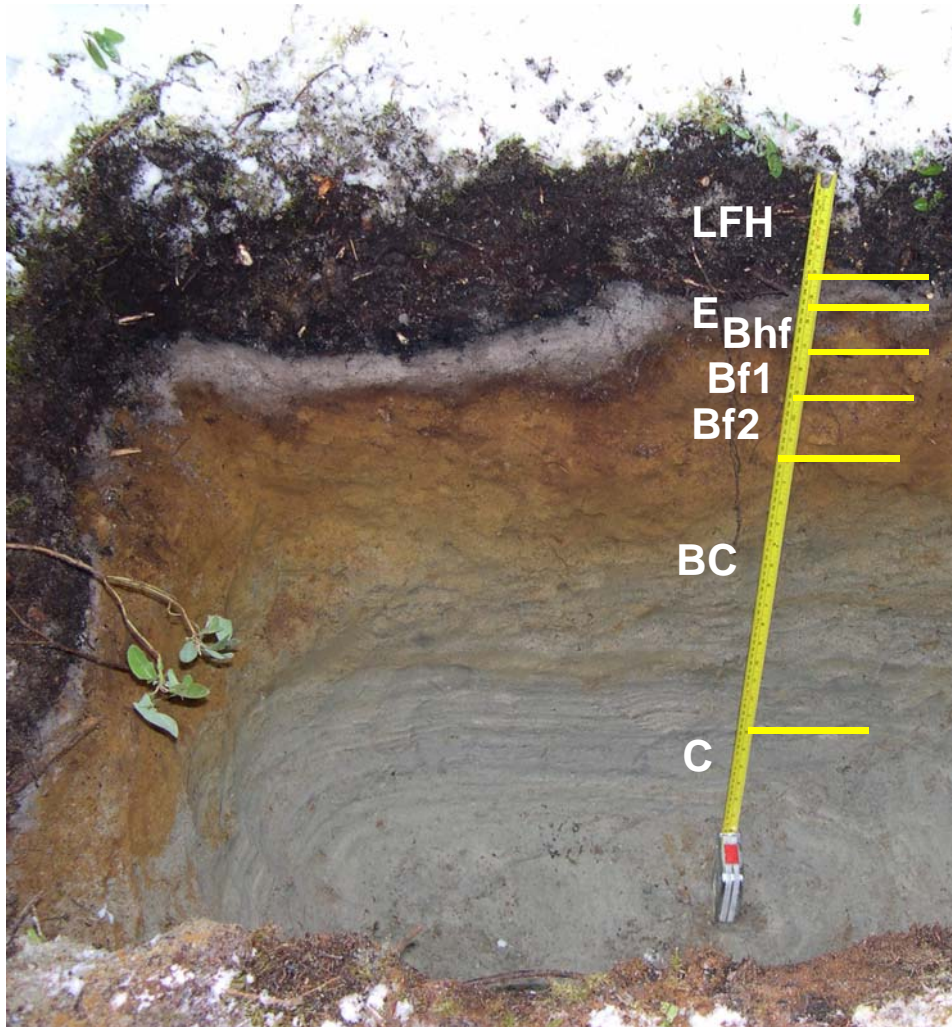
*Ressources naturelles
et Faune*

Québec 

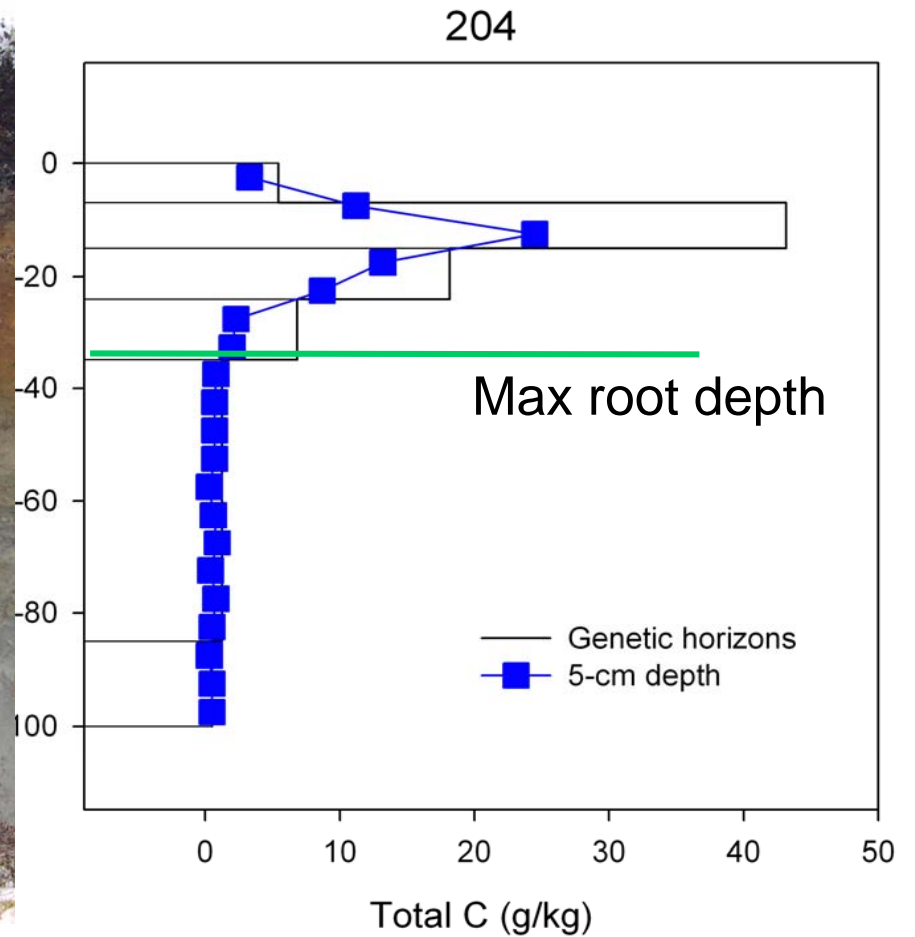
Quebec Forest Monitoring Network (RESEF)



1. Site 204, black spruce stand, boreal forest , 2002



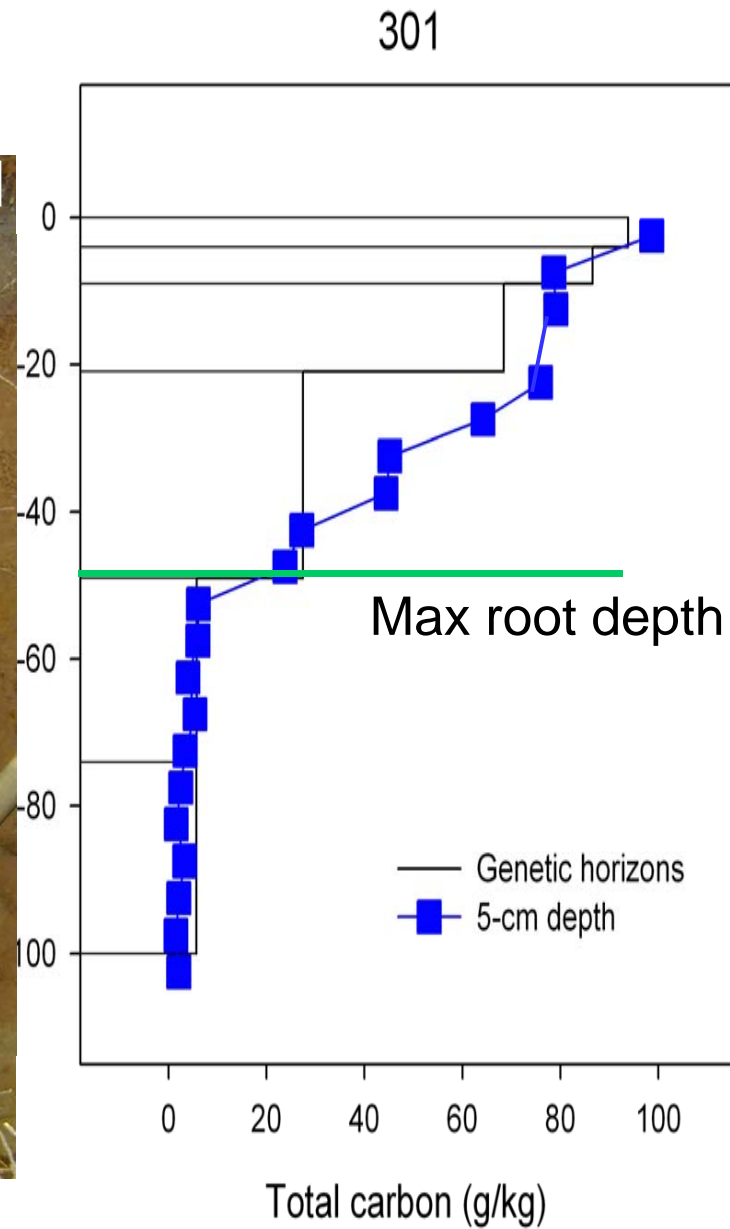
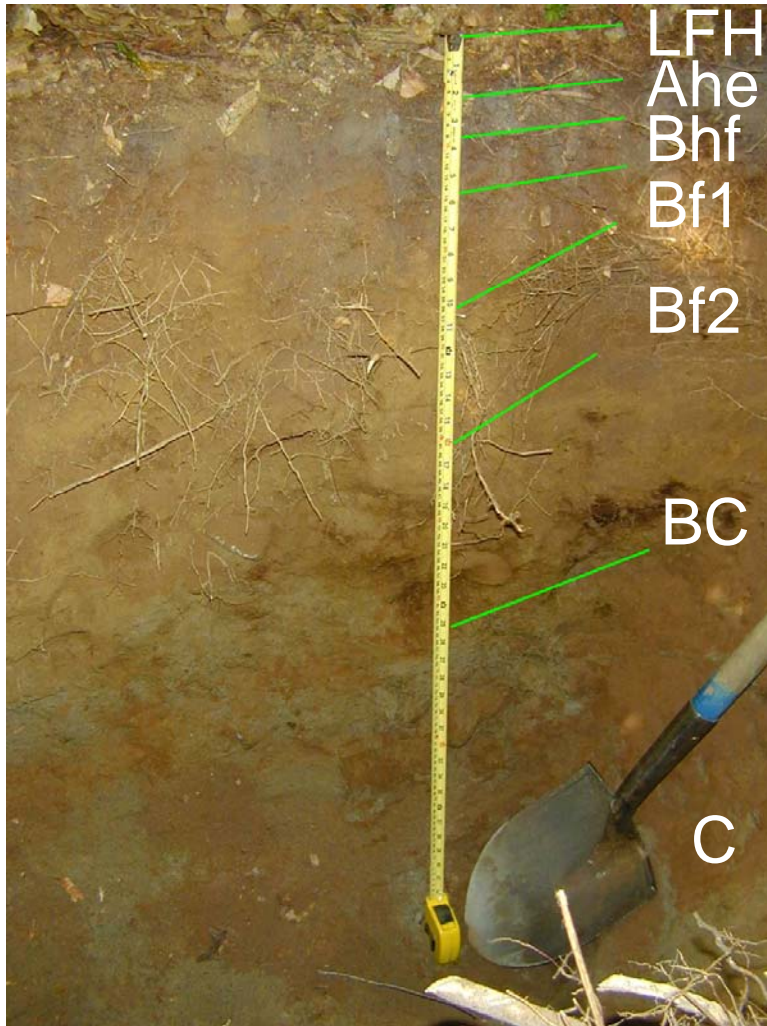
3



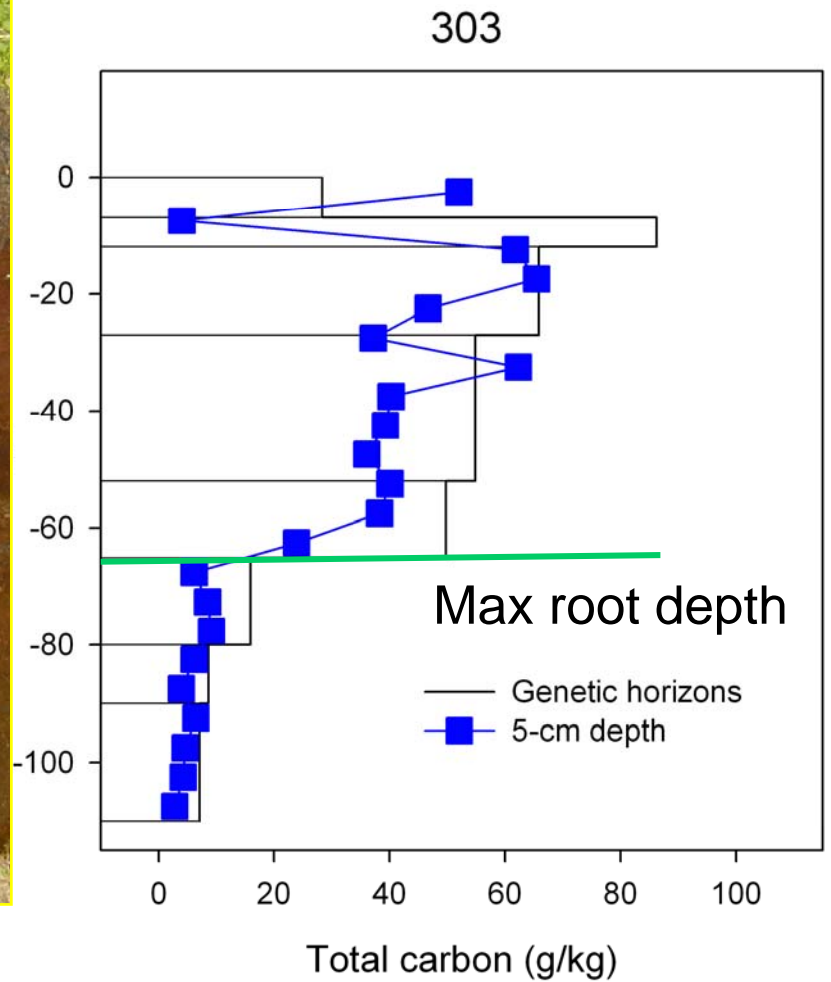
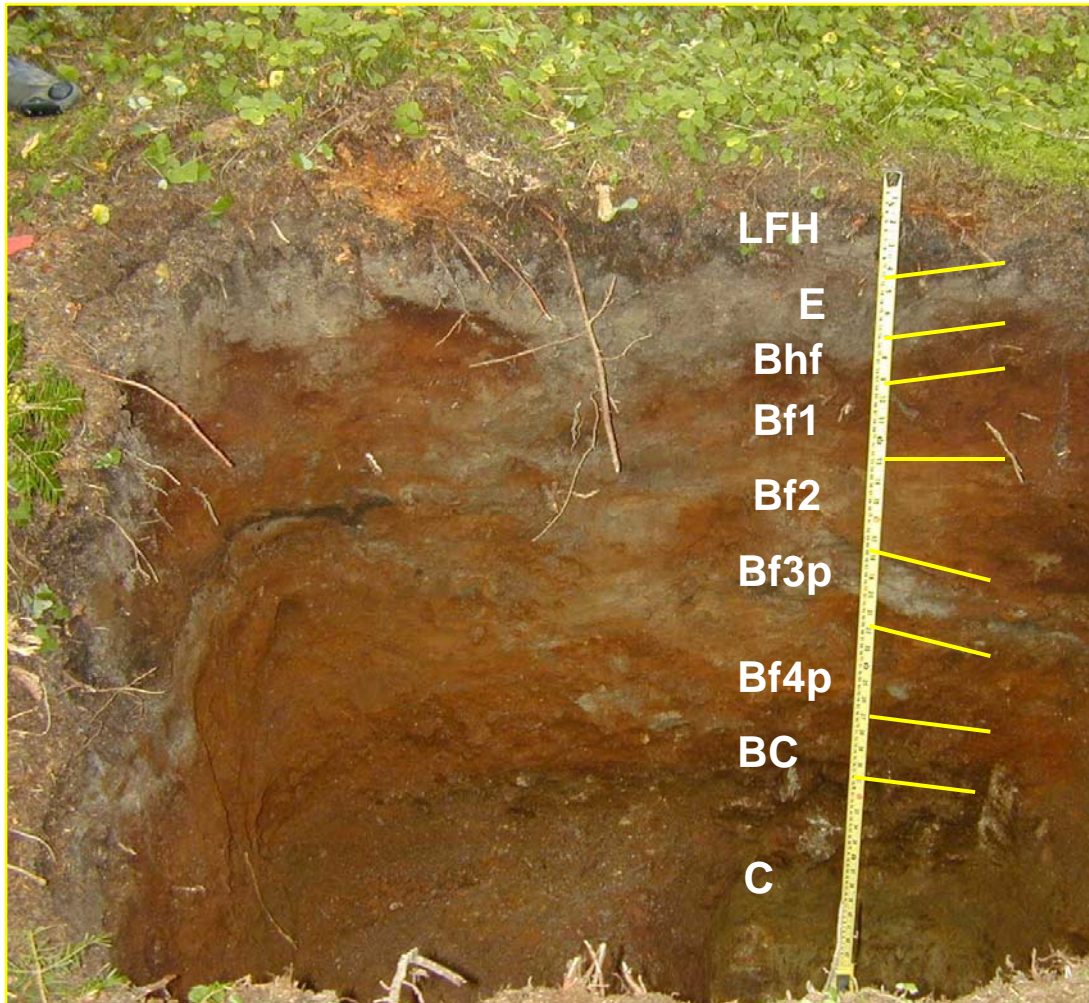
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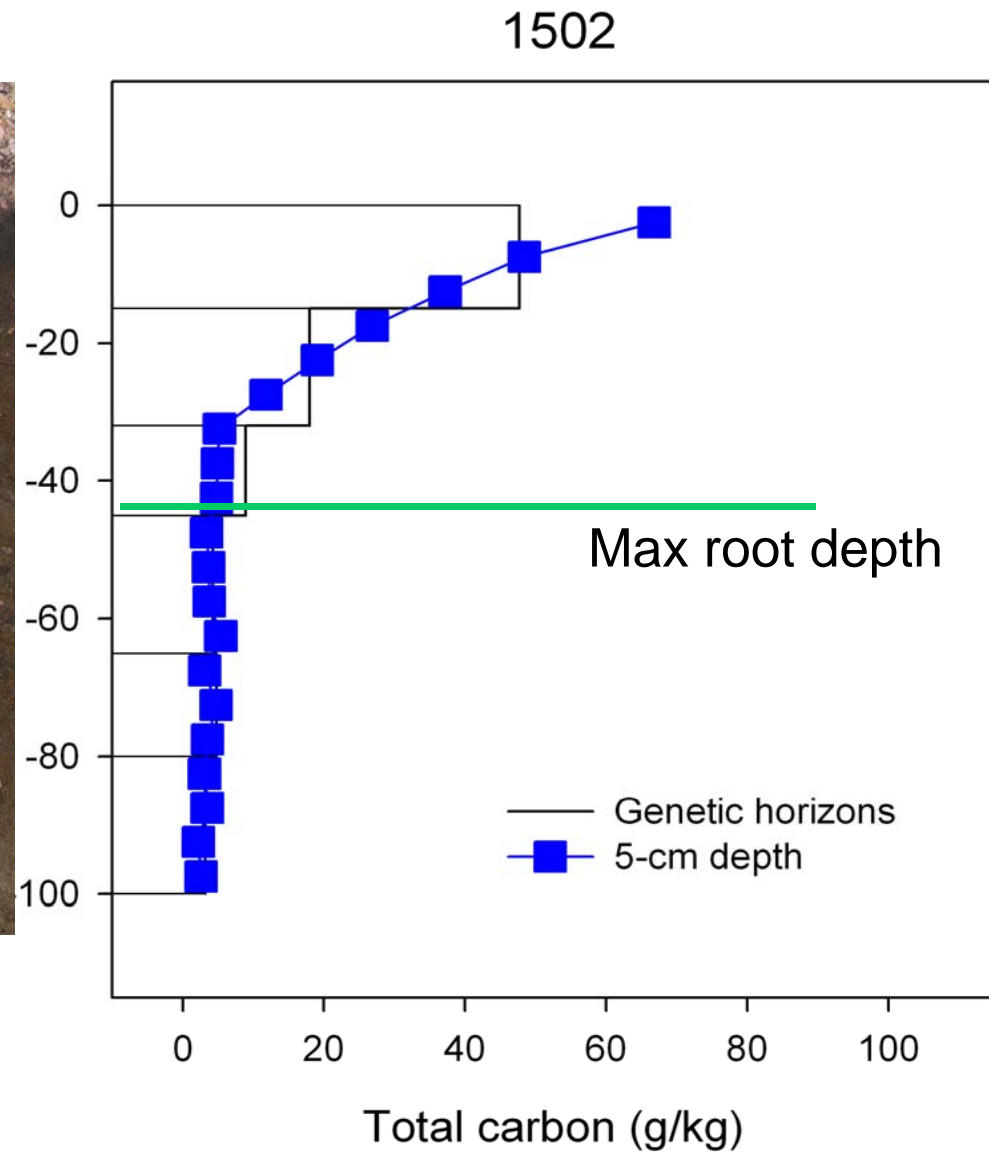
2. Site 301, Northern hardwood stand, 2002 sampling



3. Site 303, Balsam fir stand, boreal forest , 2002

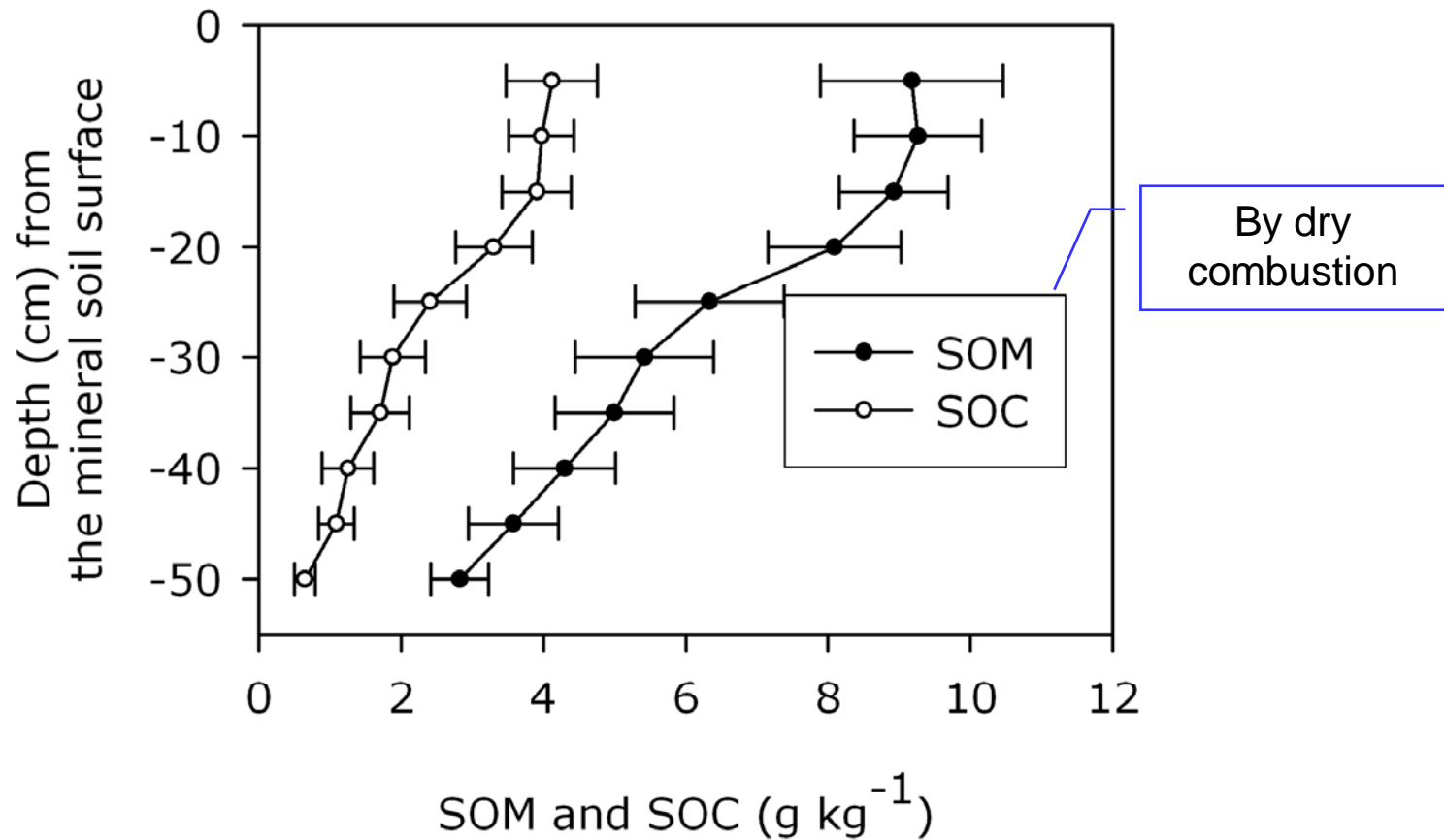


4. Site 1502, northern hardwood stand, 2004



Soil OM vs. Soil C

$$\%MO = 1.723 \times \%C \quad ?$$



Périé and Ouimet 2008 Can. J. Soil Sci. (in press)

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Recommendations in the context of soil monitoring

- ✓ Sampling by 5-cm intervals is tedious and increases the number of samples; however the resolution is better;
- ✓ Sampling by genetic horizon is **apparently** easier; however there are some loss in precision both at the profile level and at resampling;
- ✓ Compromise ? : from apparently larger horizons, cut out smaller ones (~10-15 cm) for sampling by genetic horizon.