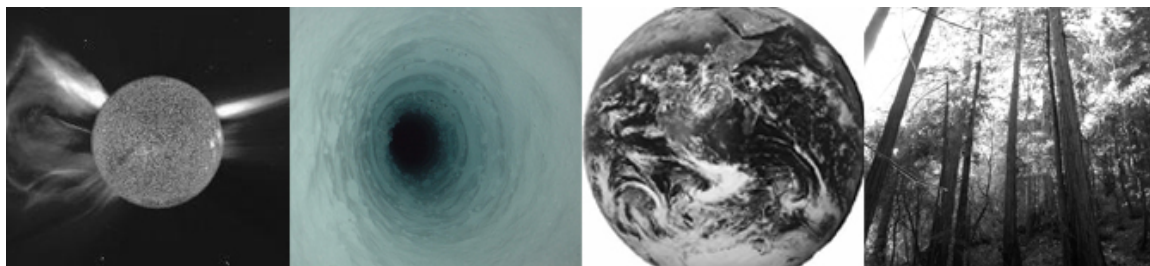


# Environmental Sciences And **CREATE** Seminar Series

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## Carbon loss after clear-cutting: SOM thoughts

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Soil organic matter (SOM) represents a significant store of carbon, and factors that influence its stability are essential to understand, particularly since rising greenhouse gases such as CO<sub>2</sub> play an important role in exacerbating climate change. Several studies have documented losses of SOM as a result of forest harvesting, particularly in mineral soils below 20 cm, but the specific mechanism for this loss has not been identified. Priming of SOM decomposition has been observed in some soils with the addition of labile carbon sources, so it is important to consider whether leaching of organic matter from litter through soil profiles is a mechanism that might explain these observed harvesting-related losses. Here I will present preliminary results of a study whose objective is to quantify changes in respiration rates from paired soils differing only in their harvest history, through depth and under carbon amendment conditions that closely mimic those found in the field setting.

All are welcome.

Thursday, **April 4<sup>th</sup>**, 2013

1:15 – 2:05PM

Physical Sciences Centre 2045

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