

Root system carbon pools in northern peatland forests: Effects of stand density manipulation

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Woody roots may be a significant C pool in forested ecosystems. Their morphology and C pool vary among different sites. It has been suggested that in sites with deep organic soils (peatlands), root system C pool might be one third higher than in otherwise similar stands in mineral soil sites (Laiho & Finér 1996). We measured the total mass, wood density, and C content in the root systems (diameter ≥ 1 cm) of 47 Scots pines (*Pinus sylvestris* L.) growing on drained peatland in northern Finland. 31 of the trees had been felled recently, and 16 trees 6 years previously. Our objectives were to examine the effects of changes in stand density on the root system C pools of both single trees and sites, and to estimate the rate of decomposition of the root systems. The first results are presented in this poster.

Laiho, R. & Finér, L. 1996. Changes in root biomass after water-level drawdown on pine mires in southern Finland. *Scandinavian Journal of Forest Research* 11: 251-260.