

The potential of forest floor transfer for the reclamation of boreal forest understory plant communities

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Abstract

We examined a direct forest floor transfer reclamation technique to establish a native boreal forest understory plant community on a reclamation site at a coal mine. Forest floor material was salvaged from an aspen-dominated (*Populus tremuloides* Michx.) donor forest at two depths (15 and 40 cm) and placed at a reclamation site at those same depths. We conducted vegetation surveys at the donor site prior to salvage and at the reclamation site in the first year. The surveys showed that the donor site had a later successional plant community than the reclamation site, which had a recently disturbed/early successional plant community. The 15 cm depth treatments had higher percent cover and species richness than the 40 cm treatment but the species compositions were similar. This reclamation technique shows potential to effectively establish a species-rich native understory forest plant community in the future.