



Dominating soil typologies in burned areas of Dzūkija National Park (Lithuania)

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A big part of the scientific community consider fire disturbance as an ecological factor which becomes an integral part of the structure and dynamics of the biotic components of forests. In Dzūkija National Park, likewise occurs in other boreal forests, fire perturbation has become over time one of the main natural components which models and structures the landscape. It is indeed known that park's forest territory presents a high sensitivity to wildfire and soil typologies could have certain implications when evaluating vulnerability to fire. To carry out this study, a total of 28 burned-stands were explored. Information collected in the forest related to fire concurrence as well as current dominating overgrowing were registered. In this way, interpretation of field work results was aimed to elucidate dominating soils in burned areas which potentially are more prone to wildfire. The majority of fire-affected stands were found on soils of type "Na" -78% of total sites-, a few ones of "Nb" -18% of burned plots- and, eventually, fire was also evidenced in "Lb" soils -4%. "Na" typology belongs to very dry and unfertilized soils and, thus, very sensitive to fire, with dominating community of *Cladonio-pinetum sylvestris*. In "Nb" stands there are more fertilized soils with *Vaccinium vitis-idaea* in some cases with transitional associations of *Vaccinium myrtillus*. "Lb" typology refers to wetter soils with undergrown of *Vaccinium myrtillus*. Overall, fire has regularly been occurring in dried and non-fertilized soils, were preconditions for burning increase; whereas burned stands within more humid environments were rarely found.