

# Impact of deforestation on carbon sequestration, nutrient balance and risk elements mobility – project introduction

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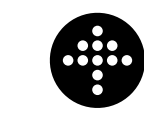
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The aim of this three-year (2022–2024) project is:

- To evaluate changes in forest soils on clearcuts,
- To quantify changes in carbon sequestration
- To predict development of soil carbon sequestration with the progress of bark beetle outbreak.
- To model expected changes in soil carbon sequestration due to changes in the species composition of forests.
- To evaluate the risk of nutrient loss and release of potentially risk elements from forest soils to surface water.
- To develop recommendations for forest management supporting soil carbon sequestration and other soil functions on clearcuts.

Other question is which changes we should expect in soil carbon sequestration due to changes in the species composition of forests. And, subsequently, if species composition is changing, we can expect changes in organic layer quality and quantity as well and there is a risk of heavy metals being released into the soil solution.

That's way one important result should be a recommendation for forest management supporting soil carbon sequestration and other soil functions on clearcuts.

Field work is focused on the ICP Forests Level I plots which were deforested during last five years and in three work packages is carrying out/is assessing

- the rate of decomposition of organic matter,
- chemical and microbiological changes in top soil (up to 30 cm depth)
- chemical changes in whole soil profile up to 80(100) cm depth.



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