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Soil Collembola communities within Plešné Lake and Čertovo Lake catchments, the Bohemian Forest

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The soil Collembola communities were studied for three years in disturbed spruce forest stands in the catchments areas of Čertovo and Plešné Lakes in the Bohemian Forest, Czech Republic. The study was focused on the impact of the windthrow, bark beetle outbreak damage and consecutive changes in the forest stands including soil environment. Four different treatments were selected for the study on both study areas: undamaged (control) forest stands, "dead" forest stands damaged by bark beetle, slightly managed windthrown forest stands left for the natural succession, and freshly harvested windthrown stands. After two years of research a total of 7,294 Collembola specimens were recorded belonging to 93 species. We recorded the highest collembolan abundance and species richness in the reference stands within catchments of both lakes, while both given parameters were considerably lower in harmed forest stands. To summarize, the disturbance led to a general decrease of Collembola communities.