

Does restoration increase spruce bark beetle (*Ips typographus*) risk? – Experiences from Koli National Park, Eastern Finland

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Abstract

Restoration treatments of mature spruce forests mimicking natural hazards may result in an increased risk of bark beetle infestations. Commonly applied techniques for the production of decaying wood in boreal forests with management history are ring-barking and felling of individual trees or trees in groups. We applied the aforementioned techniques to the production of decaying and burned round wood in the restoration of even-aged Norway spruce stands with management history within the Natura 2000 area of the Koli National Park, Eastern Finland. In order to assess restoration-originated biotic risks to health of mature spruce forests, we implemented in 2005–2009 pheromone trapping for monitoring the changes in spruce bark beetle (*Ips typographus*) population in the restoration areas of Koli National Park and fresh logging areas as reference sites. After three years results, burning seemed to increase the spruce bark beetle population at the site considerably.