

## **Reproductive Success of the Spruce Bark Beetle *Ips typographus* and Impact of Natural Enemies in Five Years Following a Storm-Felling**

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**Abstract** After a large storm-felling in Sweden in November 1995 the reproductive success of the bark beetle *Ips typographus* and the densities of natural enemies were studied by sampling of bark from colonised trees. The study was conducted in two reserves where all storm-felled trees were left. In the first summer *I. typographus* only colonised storm-felled trees. In the second summer both storm-felled and standing living trees were colonised, while in the third to fifth summers only living trees were attacked. After the fifth summer no more trees were killed by the bark beetle. The reproductive success of *I. typographus* was highest in the storm-felled trees and decreased over the five-year period while the density of enemies increased over the same time. More than 50 % of the variation in the reproductive success of *I. typographus* could be explained by the egg gallery density of *I. typographus*. The densities of enemies did not contribute to explaining the remaining variation in reproductive success of *I. typographus*. Thus, this study indicates that intraspecific competition is an important factor contributing to terminating outbreaks of *I. typographus*.