**Abstract** 

This thesis summarizes the basic knowledge about the dynamics of spruce forests in Europe on

Holocene scale. It presents an overview of glacial refugia during the last glacial maximum and

migration routes of spruce expansion to Europe. It also presents the basic facts about

disturbancy dynamics and differences in disturbancy dynamics of northern and central Europe.

In the last part, I have listed the basic palaeoecological methods that help in the study of spruce

disturbances.

**Keywords**: Norway spruce, Holocene, disturbance, dynamics, paleoecological methods