

# Abstract

Prescribed burning is a method that has been used since prehistoric times to keep unforested areas. In pastures, fire was used to remove dead biomass, return nutrients to the soil and improve forage quality, as well as to convert forests fields to a shifting agriculture. The abandonment of burning in the last century has led to an accumulation of plant biomass in the landscape. This, combined with global warming, is now creating the threat of dangerous fires.

In 2022, controlled burning was allowed in the Czech Republic as a way of managing habitats that are at risk of becoming woodland without proper management. Rare heliophilous plant and animal species are tied to them. It would therefore be advisable to reintroduce this management method, together with monitoring and control of its effects on species and communities.

The aim of this backelor thesis is to summarise the existing knowledge about prescribed burning in Europe. It also describes how controlled burning affects the dynamics of dry grasslands and heathlands. The main focus is on attributes of controlled burning that can be used to maintain selected habitats.

Keywords: fire, vegetation, landscape management, succession