



## **Phenology as used for studies on sustainable management in tree-line areas**

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Tree-line ecosystems are heavily impacted by changes in climate and land use, resulting in land abandonment and reforestation of formerly treeless areas, often with strong consequences for the society. An ongoing EU COST Action (SENSFOR, 21 countries) aims at integrating scientific results and methods related to biodiversity conservation and sustainable management of natural resources by such changes, and plan also to develop strategies for preserving ecosystem services, in sensitive mountain areas in Europe. In this work phenology is important as a good indicator on changes in the climate by using data e.g. on timing of bud break in spring at woody plants. The Action assesses the extent of contemporary and future environmental changes in European tree-line areas, and will estimate their resilience to changes, e.g. the survival of germinating new plant species at increased tree-line elevation.