

Learning by doing - transfer of know-how in monitoring tree vitality. Czech-Norwegian cooperation in forestry education

Project facts

Project promoter: Mendel University in Brno (CZ)

Project number: CZ-EDUCATION-0094

Initial project cost: €124,909

Donor project partners: Norwegian Institute of Bioeconomy Research (NIBIO), Norwegian University of Life Sciences (NO)

Programme: Education

Description

Forestry changes dramatically as European forests face devastating losses caused by global change and emerging pests and pathogens. These threats cause severe habitat loss, reductions in forest carbon sink strength and biodiversity, economic losses to the forestry sector, and subsequent socioeconomic impacts (including reductions of most types of ecosystems services). Forests cover about one-third of Europe's total land area and provide various benefits to European citizens. However, the forestry sector with its products and associated businesses, ecosystem services, and social aspects are threatened by forecasted global climate changes. As such, forest health is a "hot topic" in society, and there are often opposing groups dominating the public debate, usually based on subjective assessments. However, we already have several recently developed instrumental techniques in modern forestry that give precise, objective measurements of different vital functions in trees. Our project aims to motivate and teach forestry students to take science-based decisions regarding the future of European forests by introducing them to direct, hands-on experience with the latest vitality monitoring equipment for forest trees. We will select experimental sites in the Czech Republic and Norway, install state-of-the-art monitoring equipment, and measure essential tree vitality functions. Students will be involved in site selection, installation of equipment, measurements, data interpretation and communication of the results. By giving the students direct hands-on experience with the latest equipment, they will access objective data sets, develop their ability to interpret data, and learn how to communicate their findings to the public. Finally, the project will strengthen international cooperation on the vital topic of forest health.