



Czech University of Life Sciences Prague

**Faculty of Forestry
and Wood Sciences**

Web applications

SOJKA („jay“) application

In 2019, the mobile application and collection server were completed and now is being tested. Reports of findings injured or death animals are created by users through a smartphone application on Android and iOS platforms. Each report contains the user-specified animal species, the geographical position of the finding and, optionally, an accompanying photograph and additional note. The created reports are sent to the collection server, which saves the reports in the local database and, based on the settings available by the administrator, selects the institution that can best handle the report. Then, the server contacts the selected institution using a predetermined method (e-mail,...) and provides the details of the report needed to process it. The basic components of the system are i) applications for smartphones on the Android platform; ii) smartphone applications on the iOS platform; iii) collection / sending server; iv) a server with a system administration interface. The application will be available during May / June 2020. This application is the result of project: Proof-of-concept: Monitoring the occurrence of wildlife. The project aims to create a comprehensive system for collecting reports on found dead or injured animals in the capital city of Prague.

SUSSelect application

This application is one of the results of the project „Conservation and sustainable utilization of forest tree diversity in climate change (SUSTREE)“ which took from 2016-2019. The SUSSelect application is a tool for forest owners, who can use it to recommend the ideal reproductive material for the afforestation of the selected forest areas.

<https://www.fld.czu.cz/cs/r-6826-veda-a-vyzkum/r-7936-projekty/r-11773-externi-projekty/r-11849-mezinarodni-vedecke-projekty/r-11968-sustree>

The link for uploading the SUSSelect application:

https://play.google.com/store/apps/details?id=com.topolynx.susselect&fbclid=IwAR1B_1BdJYE-K9ZyYqAIrtDZHp8IZoflSqCpCqEa4pKlr6H0PIYmcVST5w

Senoseč application

The Senoseč Online project is the project of the Czech University of Life sciences in Prague, the Ministry of the Environment of the Czech Republic and other partners, with the active participation of hunters and volunteers from the public.

The aim of the project is to support the prevention and protection of animal species during mowing the grass and harvesting agricultural crops in the Czech Republic every year in the period from May to June.

<https://senosec.czu.cz/>

The link for uploading the Senoseč application:

<https://play.google.com/store/apps/details?id=cz.czu.senosec&hl=cs>

LesKalk application

This application allows you to estimate the volume of a standing tree by entering its height and diameter at 1.3 m of its height.

IpsExpert

The IpsExpert web application was created based on algorithms for calculating the threat of forest stands by bark beetles. Documentation (help) was created for the application.

Optimal software

As part of a project focused on the temporal and spatial optimization of forest harvesting, the application Optimal was created for editing regenerative elements in a digital forest map and calculating optimization. The application is currently designed as an extension to the commercial software ArcGIS. A website www.optimalsa.com and a video presenting the project were also created for the project. The video is located on the mentioned website.