Assessing the confidence in pest freedom gained in past pine wood nematode surveys

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The confidence gained in past surveys is rarely assessed

All EU countries are required to conduct annual surveys for the pine wood nematode (*Bursaphelenchus xylophilus*, PWN) to ensure its timely detection, with a high degree of confidence.

Since the confidence in pest freedom achieved with past surveys is rarely assessed, achieving the required high degree of confidence is very resource consuming.

Apps to facilitate assessments

We will facilitate the assessment of the confidence in freedom from PWN gained in past surveys by developing

- an app for assessing the confidence of past surveys,
- an app for retrieving the land cover data needed in the assessment, and
- instructions on how to conduct the assessments.

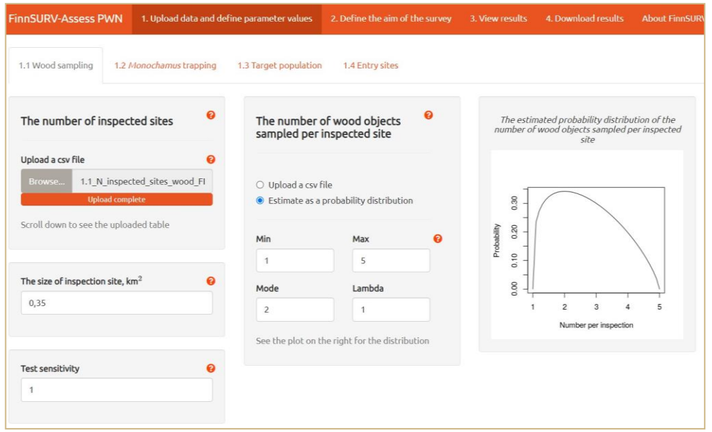
The apps and instructions will be tested by assessing the confidence of past PWN surveys of Finland, Estonia, Lithuania, Norway and Sweden.

The app for assessing the confidence gained in past PWN surveys

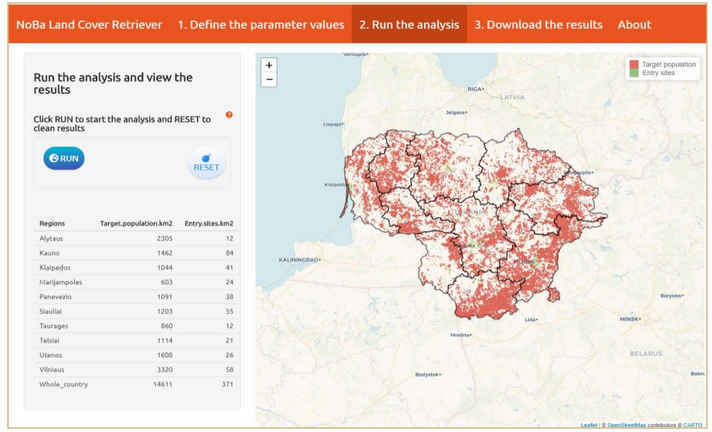
This app will be based on an already published app called FinnSURV-Assess PWN (http://finnsurv-assess-pwn.rahtiapp.fi/).

First, the confidence level of inspections is assessed based on the number of items sampled per inspection. Then, the confidence level of the annual survey is assessed based on the number of inspections.

Finally, the probability of pest freedom gained in multiannual surveys is assessed by progressively updating the estimate with evidence gained in the annual surveys.



A view of the FinnSURV –Assess PWN -app on which the currently developed app is based on.



A view of the draft app for retrieving land cover data.

The app for retrieving land cover data

This app will allow non-GIS-experts to retrieve Corine Land Cover data needed in the statistical assessment and planning of pest surveys, i.e., the area of the target population, entry sites and risk areas. The countries included in the app will be Finland, Estonia, Lithuania, Norway and Sweden.

Further information

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