

Are we ready?

– Simulation exercise on *Agrilus planipennis* in Slovenia

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1 INTRODUCTION

In 2020, in a framework of Slovenian national project „Development of organizational and technical support for effective actions against the outbreaks of forest pests“ (2018-2020) the Slovenian Forestry Institute organized first simulation exercise for a priority forest pest on a case of hypothetical finding of *A. planipennis* on 4 ash trees (*Fraxinus excelsior*) in forest near Brežice, SE Slovenia (close to border with Croatia).



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In the time of simulation, the recommendations from the **standard EPPO 2013 PM9/14 (1)** procedure of eradication process of *A. planipennis* were implied. After first detection of infested tree, **regulated area** of 20.000 m radius would have been determined, to prevent movement of possible infested wood and plants. **Delimiting survey** would have been carried out in the area of 1.000 m based on visual inspection, setting traps and taking samples. All the infested trees would have been felled down and around infested trees, 100 m radius of all host trees would have been cut down (**infested area**). For each fallen tree there would have been made visual inspection with bark removal confirming or denying presence of *A. planipennis*. Upon detection of additional infested trees new clear cut areas would have been established around infested area in radius of 100 m.



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In the case of the simulation exercise, a total of 1.346 host trees would have been cut down including trees of DBH less than 10 cm. These trees would have been inspected by authorized personnel in accordance with the EPPO standard. The economic damage in the example of a simulation exercise was calculated using the online application WoodChainManager based on 2020 prices and was estimated at -6.197,79 EUR, which corresponds to -31.19 EUR/m³ excluding the work of authorized personnel for visual inspections.

The simulation provided important starting points for more effective measures in the event of an outbreak of quarantine pests in Slovenian forests. Some of the most important points to be consider are:

MAIN GOALS

1. test of contingency plans for quarantine pests
2. test of an operational scheme of action and databases of information and operators
3. test of communication tools
4. test of a protocol for simulation exercises and implementation of a simulation exercise

In the simulation exercise **28 people from 5 different stakeholders** have participated:

- **the national plant health organization in Slovenia:** Ministry of Agriculture, Forestry and Food, Administration for Food Safety, Veterinary Sector and Plant Protection, Plant Health and Plant Reproductive Material Division,
- **forestry inspection:** Inspectorate for Agriculture, Forestry, Hunting and Fisheries
- **landowners:** Slovenski državni gozdovi, d.o.o. (SiDG)
- **plant health authorized organizations:** Slovenian Forest Service (SFS), Chamber of Agriculture and Forestry of Slovenia (CAFS) and Slovenian Forestry Institute (SFI).

2 LOCATION AND AREA

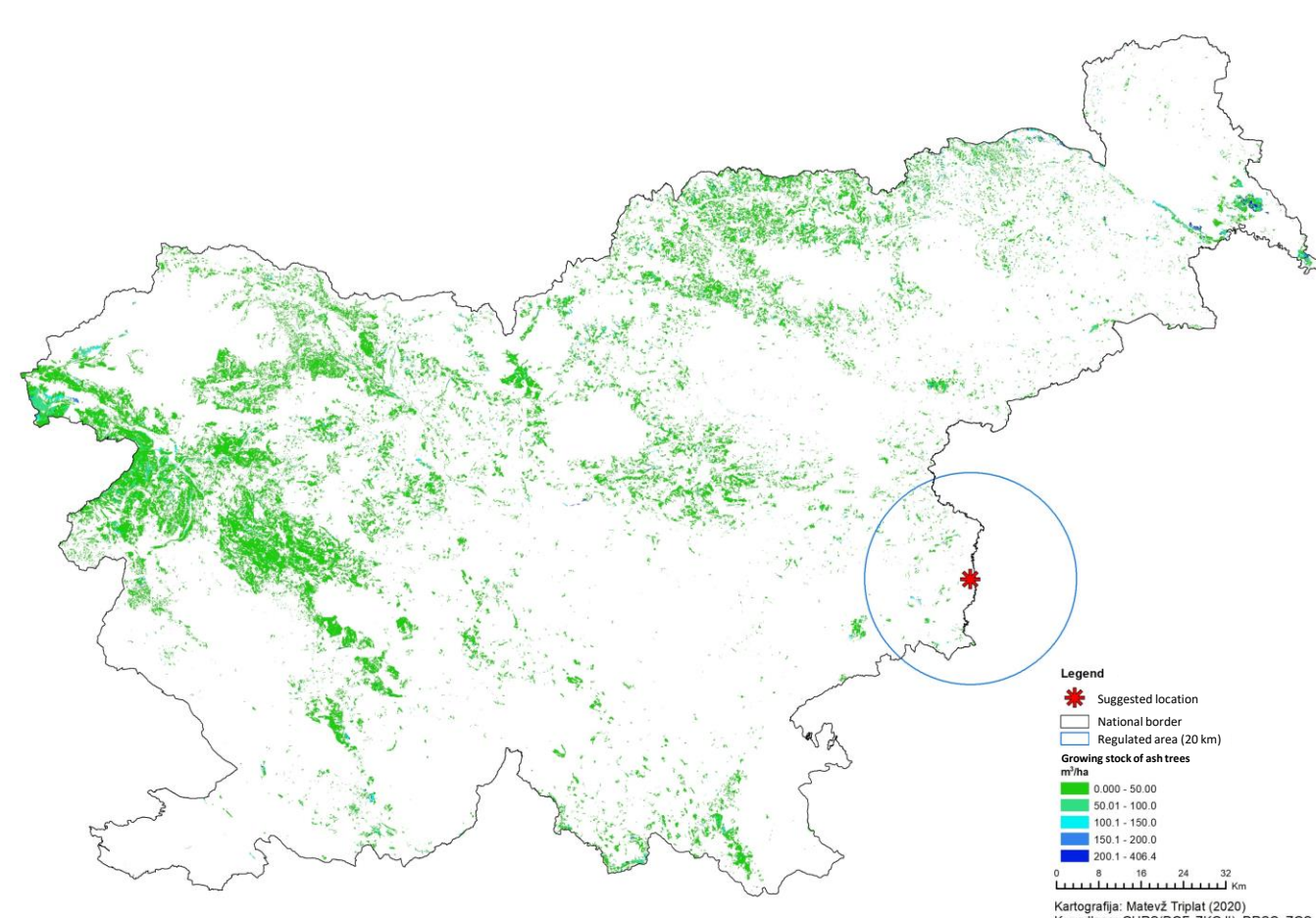


Figure 1: Location of the simulation exercise in Slovenia (red star) and 20 km radius.

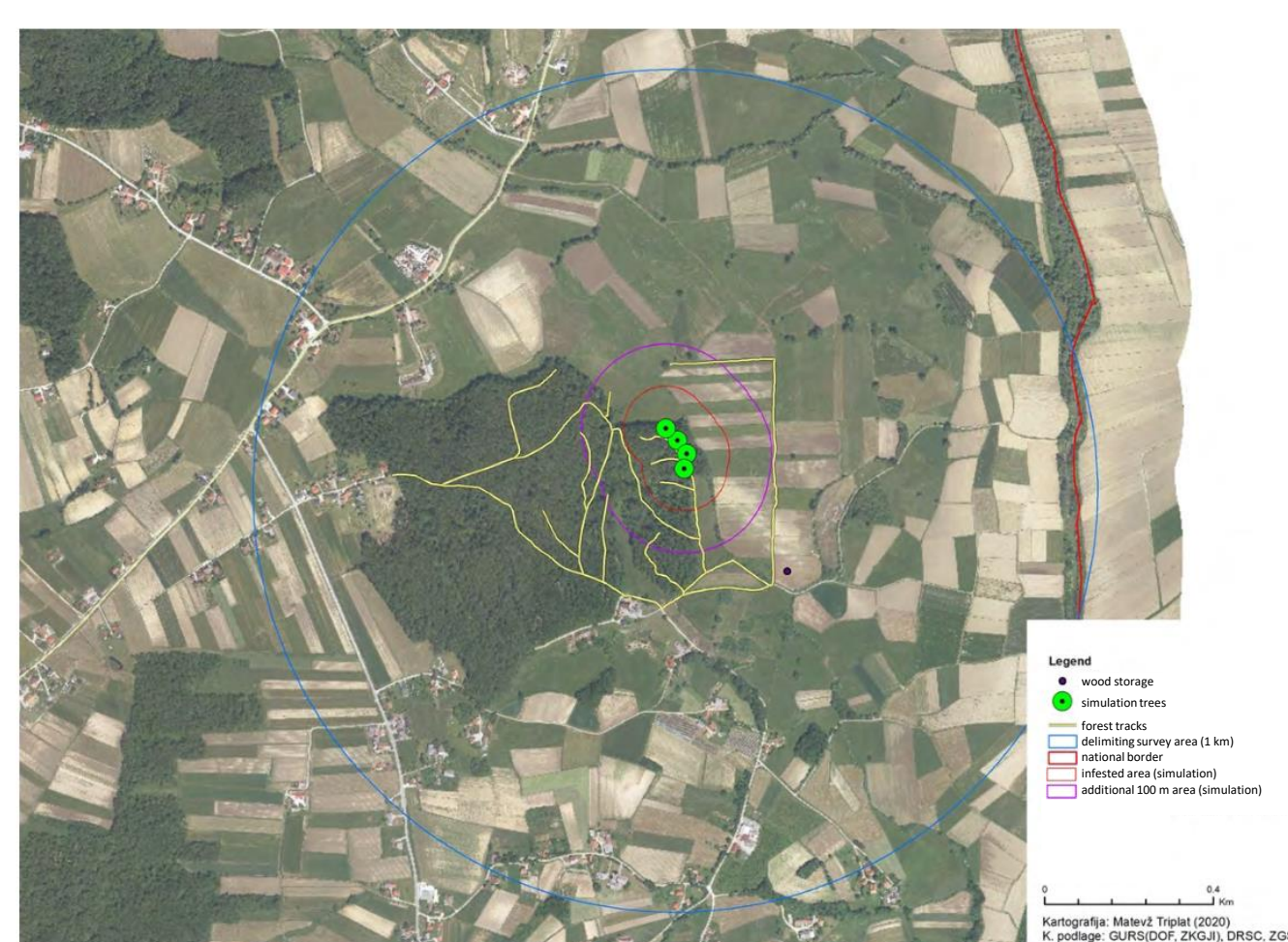


Figure 2: Location of theoretically four infested trees chosen for simulation exercise.

The location of the hypothetically infested trees was on state-owned land managed by the state company Slovenski državni gozdovi, d.o.o. (SiDG), from which we obtained permission to conduct the simulation. The public was informed about the implementation of the simulation exercise through announcements in the local and national media.



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3 SIMULATION IN THE FIELD

Stakeholders were presented with pest biology and the first steps with potential finding of a quarantine pest, from district foresters to hypothetical confirmation of the presence and notifications to official authorities and confirmation of the laboratory. It was also shown how fragmentation of cadastral parcels and ownership structure can oppose with eradication of the pest and what does that mean in terms of economic loss in Slovenia forests.



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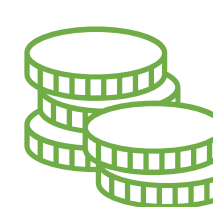
IDENTIFIED CHALLENGES



Integration of forestry legislation and plant health legislation



Educating professionals and forestry contractors who will be involved in the eradication of quarantine pests



Securing financing and have a clear cross-sectoral coordination



Improve of the existing educational programmes in the forestry education process with emphasis on quarantine species and their eradication



Structuring intervention groups in the event of an outbreak and acting quickly regardless of ownership



Raising awareness of general public

4 CONCLUSIONS

So far, no *Agrilus planipennis* has been found in Slovenia. Several preventive measures are implemented regarding quarantine pest such as monitoring at the borders, nurseries and on trade, conducting plant health surveys, raising public awareness regarding quarantine species through online and mobile application Invazivke, workshops, seminars, exhibitions and presentations of pests.

Currently, contingency plans for quarantine organisms in Slovenia are being developed. Based on that simulation exercises, communication strategies, recommendations for raising awareness and training of different stakeholders involved in eradication programs will be done.

Acknowledgments

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