



State Plant Protection Service of the Republic of Latvia

Preparedness for outbreak of Emerald ash borer, *Agrilus planipennis*, in Latvia

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Emerald Ash Borer (EAB) - *Agrilus planipennis*



**European Union priority pest
approaching EU borders**

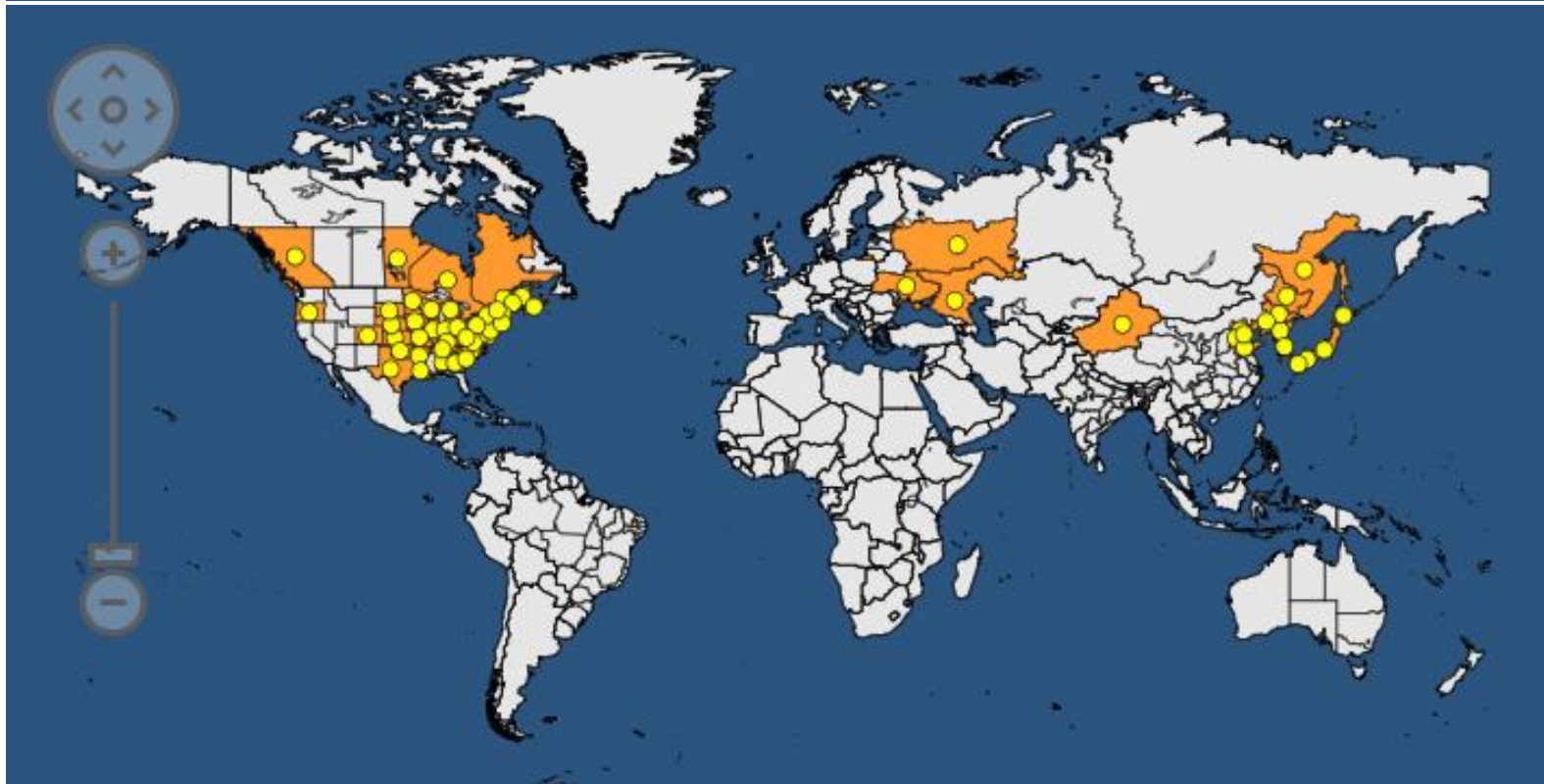
A real threat to ash trees in EU

No local *Agrilus* species affect living ash trees



EAB global distribution

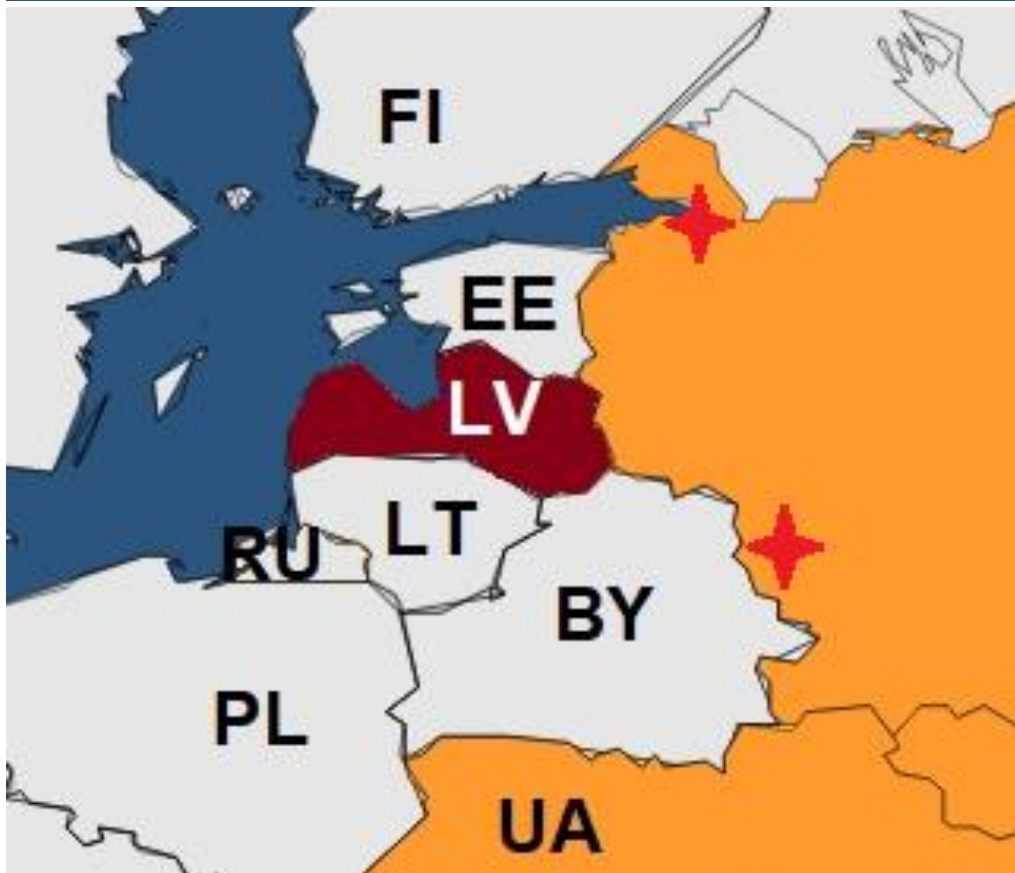
EPPO Global Database, 18 October, 2024



- » Native to East Asia
- » First outbreak in North America – USA circa 1999
- » First outbreak in Europe – Moscow, Russia 2003

EAB outbreaks in close proximity

EPPO Global Database, 18 October, 2024



- » Emerald ash borer have not been found in territory of Latvia (SPPS, 2024),
- » Outbreaks closest to Latvian border – in Russia Smolensk area (since 2012) and St.Petersburg (since 2020)
- approx. 300 km away
- » No reports on pest from Belarus (status absent, EPPO 2024).



EAB host plants in Latvia

Local species – European ash
(*Fraxinus excelsior*).

In mixed broad leaf forests,
at riverbanks, wetlands in mix
with alder.

In urban settings – roadsides,
alleys, parks, gardens, urban
plantations, uneven
distribution



Ash trees in forest (middle May)



Ash trees along street

Distribution range of European ash (*Fraxinus excelsior*)

EFSA Pest survey card on *Agrilus planipennis*, 2024



Nothern border of distribution of *Fraxinus excelsior* in Europe

Distribution of European ash in Latvia

Territory of Latvia 64 594 km²

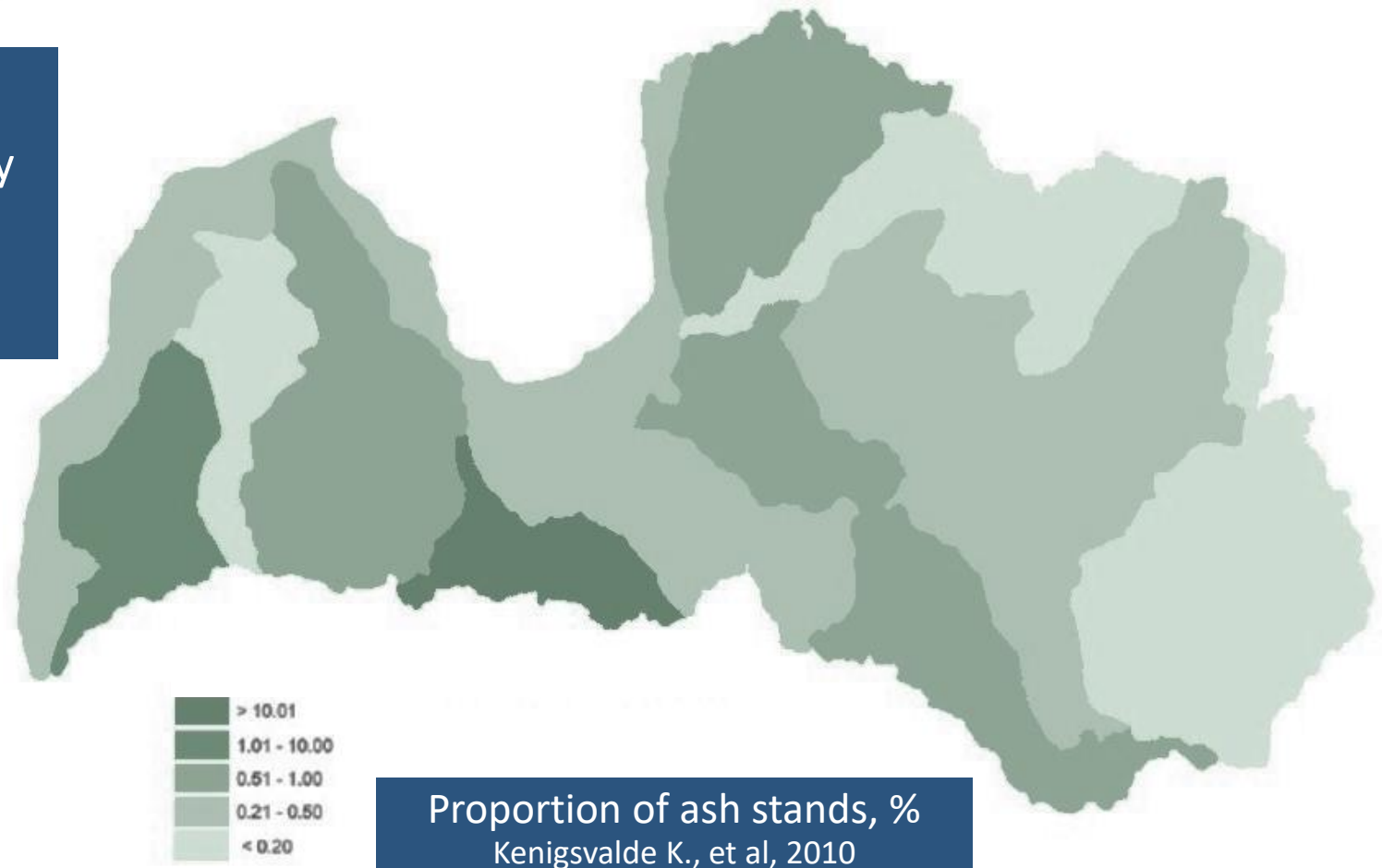
Forests occupy approx. 58% of territory

Ash stands occupy less than 0,5% of forested area

» In 2000
approx. 21 000 ha of forests
were ash stands

» In 2023
approx. 7 900 ha.
Decrease due to ash dieback

» No reliable data on ash trees in urban
settings





EAB host plants in Latvia

Introduced species –

Green ash
(*Fraxinus pennsylvanica*)

Rare in parks, urban plantations

White fringetree
(*Chionanthus virginicus*)

Extremely rare - in some parks and botanical gardens



Risk factors for ash in Latvia

In many regions trees are weakened, stressed

- e.g. affected by fungus *Chalara fraxinea*/*Hymenoscyphus fraxineus* causing ash dieback

More prone to be infested

- *Fraxinus pennsylvanica* > *Fraxinus excelsior* but infests both ash species in Europe

Host plants near risk locations:

- Railways, highways, to/from Russia, Belarus, esp. with truck parking lots, border crossing points
- Storage sites of imported ash wood from countries where EAB is present
- Ports, airports

High-risk areas determined

» 11 storage sites of imported ash wood and surrounding area are monitored for potential presence of the pest.

Most sites situated in central regions

» Territory adjacent to LV border with EE, RU, BY up to 70 km in width includes 10 municipalities



EAB surveys in Latvia

Annual EAB detection surveys since 2015

- Ash trees in **forests in high-risk area** close to RU, BY border

EAB specific survey sites:

- Afterchecks at **storage sites of imported ash wood** from countries where EAB is present
- **Ash trees in parks**, dendrariums, botanical gardens etc. – inspections in all country
- Host plants are visually inspected for signs of EAB during inspections at nurseries, garden centres, private gardens etc.

Visual inspections from mid-May to mid-October,
Trapping June-August





Trapping of EAB

Early signs are non-specific – trapping is crucial !

First traps were put in 2018 at border-cross check points

- by inspectors of import control of State Food and Veterinary service

Trapping by State Plant protection Service performed since 2020:

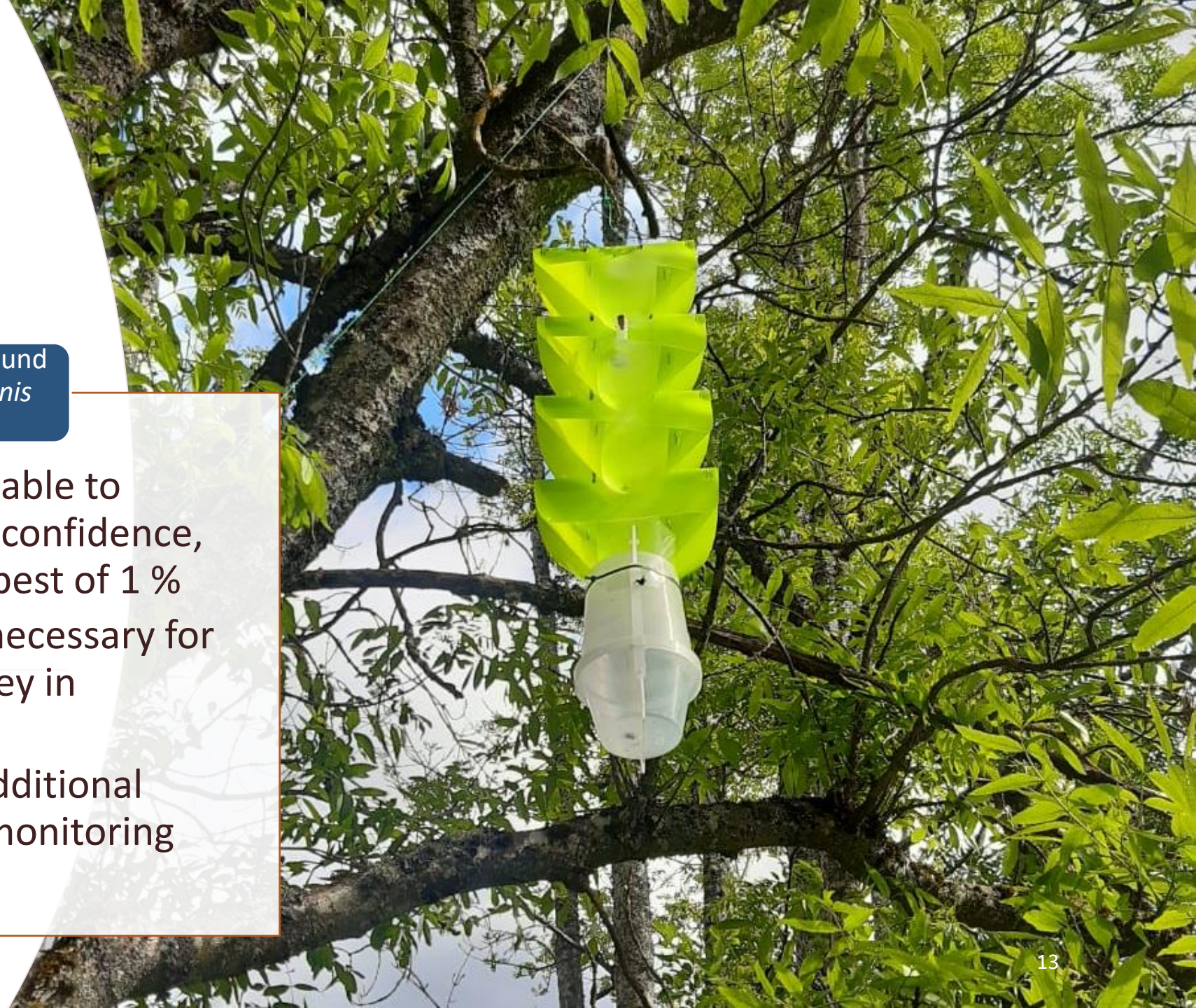
- Ash trees in **forests in high-risk area** - 2020
- **Storage sites of imported ash wood** - since 2022
- **Ash trees in parks** in high-risk area – since 2023



Trapping of EAB

According to EU legislation statistically sound and risk-based survey of *Agilus planipennis* is mandatory from 2027

- detection surveys shall be able to identify with at least 95 % confidence, a level of presence of the pest of 1 %
- Approx. 300 traps will be necessary for conducting detection survey in territory of Latvia
- In case of an outbreak – additional traps will be required for monitoring pest in the buffer zones





Trapping of EAB

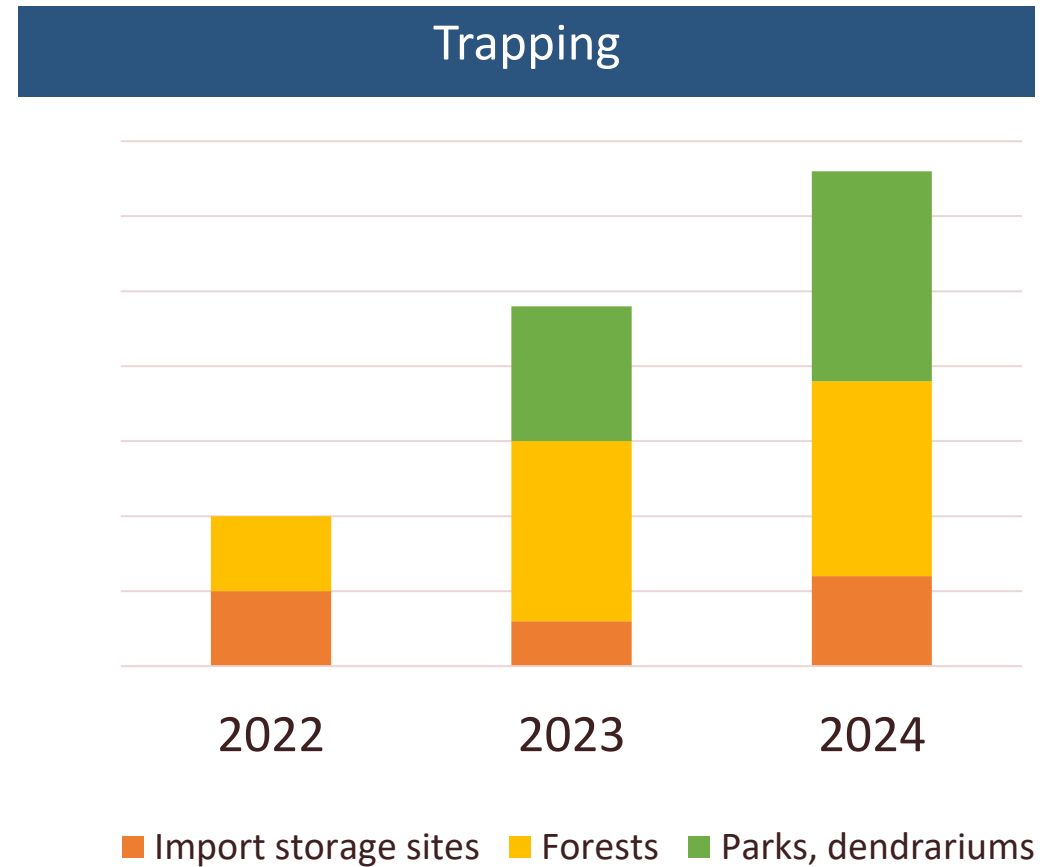
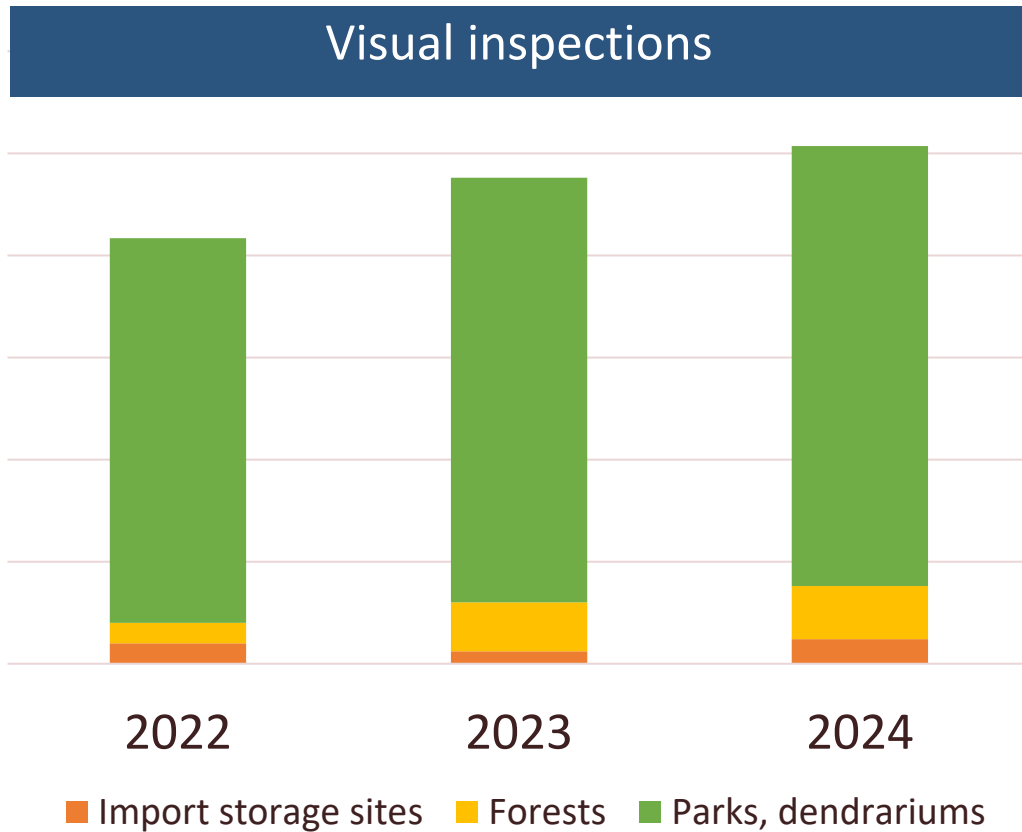
Challenges

- additional equipment needed to set up a trap high in canopy
- trap durability - can be destroyed by birds, collected by locals, get spoiled during storm etc.
- availability of traps – few offers globally
- storage of traps between seasons



Green funnel traps deployed by SPPS of Latvia in 2024

Intensifying EAB surveys in recent years





Spreading information on EAB



Campaign #PlantHealth4Life in schools

Press release on risk posed by EAB under EU campaign #PlantHealth4Life



Watch on YouTube

TV and internet

SPPS website on EAB monitoring in parks near Latvian Eastern border



idzemē – Aluksnes novads, Gulbenes novads, Smiltenes novads, Valkas novads un Valmieras novads Jersenu, Pļaju un Trikatas pagastos.



Spreading information on EAB



Entry on *A.planipennis* in SPPS annual table calendar for integrated growers 2024



SPPS created handout leaflet

A close-up photograph of tree bark, showing a circular hole that has been bored into the wood. The bark is dark, cracked, and textured. The hole is roughly circular and appears to be a tunnel entrance.

Preparing for EAB
outbreak indicated

a lot of challenges...

Challenges

Population of ash trees in Latvia:

- Sparcely distributed throughout country
- Occupies less than 0,5% of forested area
- Trees affected by ash dieback show similar symptoms

Hard to access:

- Grow along rivershores, swamplands
- Often tall trees, difficult trapping

Short season for tree observations:

- Fully bloom in mid-late May
- Shed leaves in early-mid October



Tall ash tree



Ash in early May

Challenges

- » Lack of data on ash distribution in urban areas
- » Eradication methods, compensations for tree felling
- » Outbreaks in protected areas:
 - Nature protection vs Protection from pests
 - Tree felling prohibited





State Plant
Protection Service
Republic of Latvia

Thank you for your attention!

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