



EU LIFE Programme project  
"Optimising the Governance and Management of the  
Natura 2000 Protected Areas Network in Latvia"  
(LIFE19 IPE/LV/000010 LIFE-IP LatViaNature)



# LIFE-IP LatViaNature project actions on IAS

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Projects LIFE-IP LatViaNature and NATURALIT  
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ES LIFE Programas projekts  
"Natura 2000 aizsargājamo teritoriju pārvaldības  
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# General info





# Focus on invasive alien species (IAS)

- ❖ The threat caused by IAS to native species, natural and semi-natural habitats, ecosystem functions, human health and economics is serious and constantly growing
- ❖ Their damage to the environment, including biodiversity, is rapidly increasing also in Latvia
- ❖ Urgent need for action – active management, prevention, legislation, monitoring and engagement of private landowners

## Regulation 1143/2014 - from the 88 IAS of EU concern in Latvia

- 11 species are in wild (3 plants+8 animals)
- 12 species are kept in captivity (8 plants+4 animals)



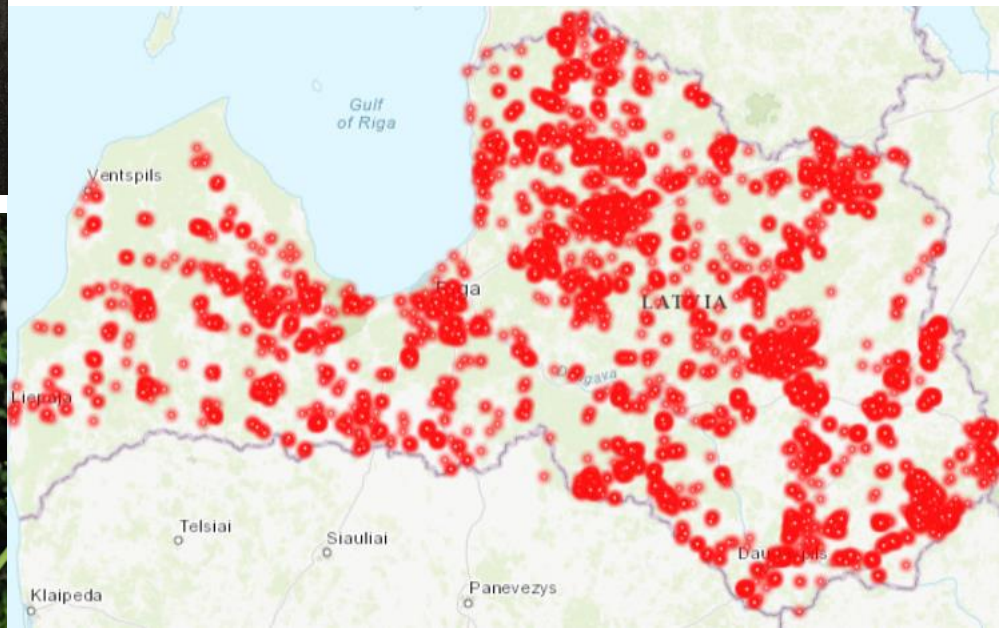
- ▼ *Elodea nuttallii*
- ▼ ***Heracleum sosnowskyi***
- ▼ ***Impatiens glandulifera***



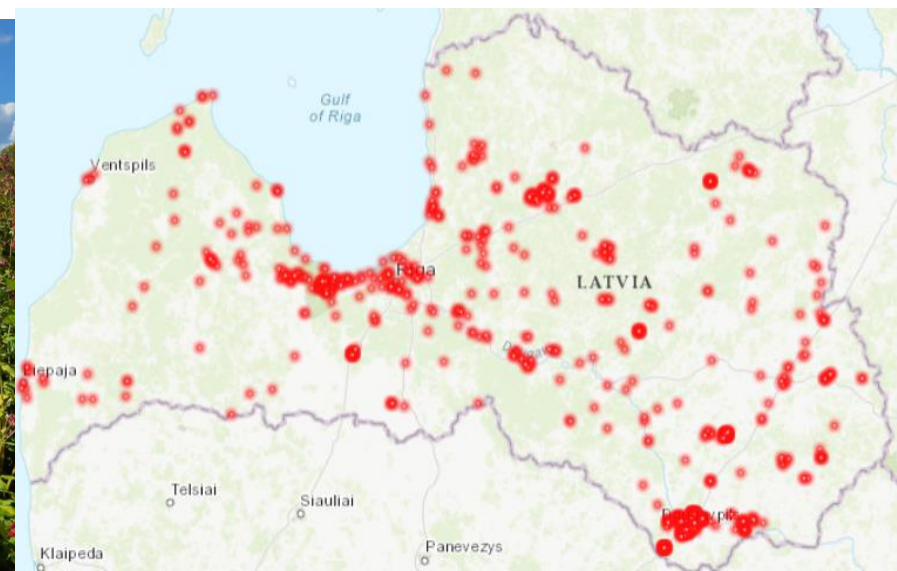
- ▼ *Eriocheir sinensis*
- ▼ *Faxonius limosus*
- ▼ ***Nyctereutes procyonoides***
- ▼ *Ondatra zibethicus*
- ▼ *Orconectes limosus*
- ▼ *Pacifastacus leniusculus*
- ▼ *Percottus glenii*
- ▼ *Trachemys scripta*



# Hogweed *Heracleum* *sosnowskyi*



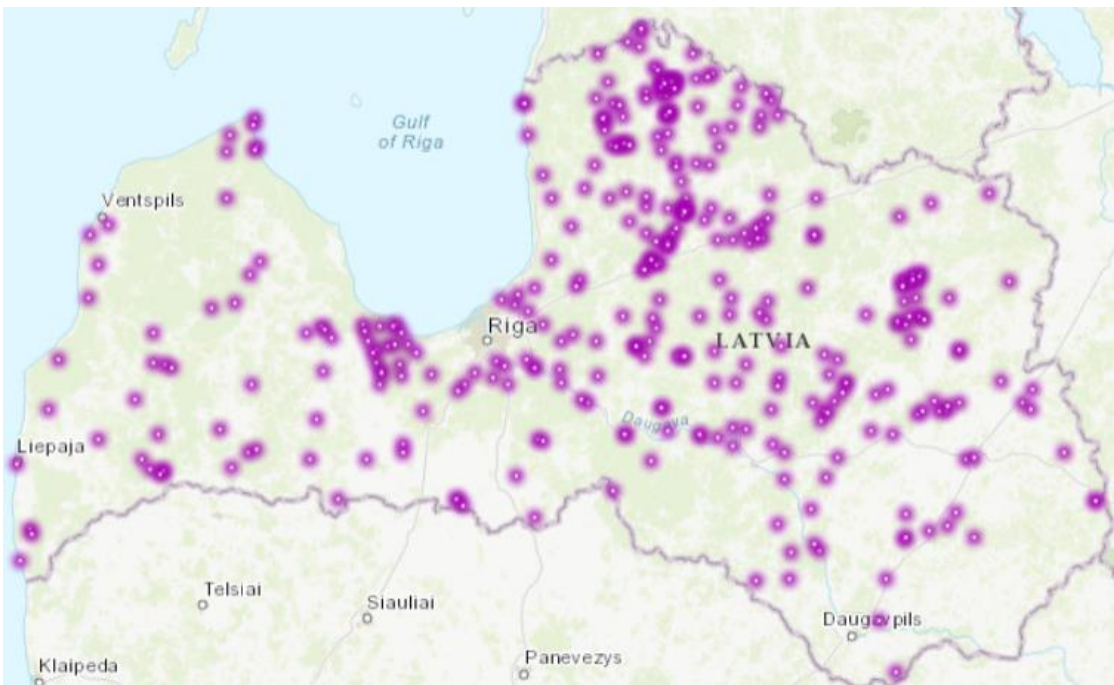
# Himalayan balsam *Impatiens glandulifera*





# Raccoon dog

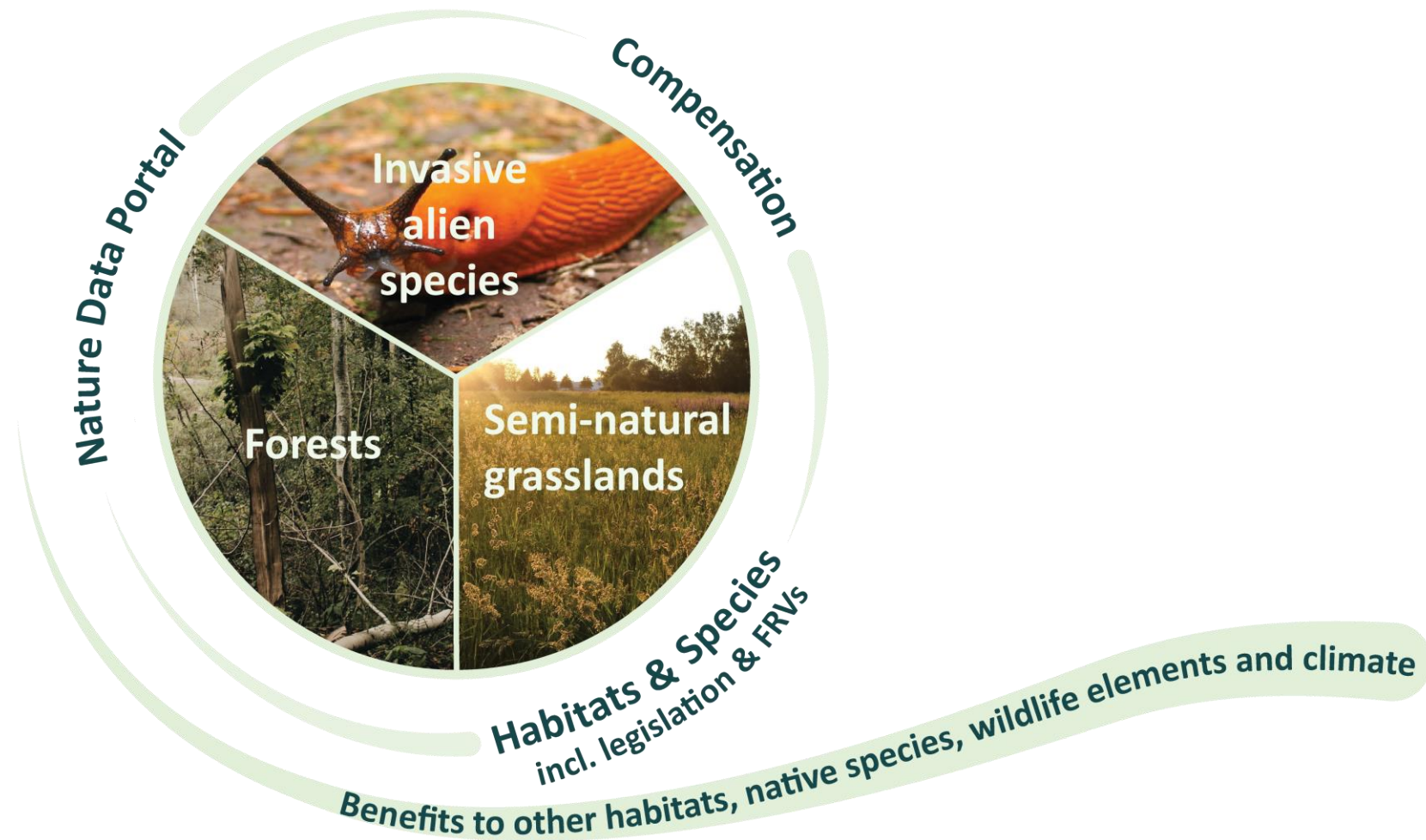
*Nyctereutes  
procyonoides*



# The two 3s

3 FOCUS GROUPS

3 THEMATIC BLOCKS





# 4 Action Blocks



**Development of regulatory framework**



**Improve the information gathering**



**New methods of eradication**



**Raising public awareness**

# Action C.5.1. Adjusting national biodiversity monitoring system to detect invasive alien species

# Monitoring

- ❖ Context – before the project monitoring programme developed only on IAS plants, but it has never been implemented to the full extent
- ❖ In the project 16 sub-programmes of the national biodiversity monitoring programme evaluated and for 12 of them recommendations developed on how to incorporate monitoring of IAS
- ❖ Steps of Early detection and rapid eradication system also incorporated
- ❖ *IAS Manager* as tool for citizen science and monitoring

# IAS Manager

Tool available in the website and ArcGIS  
Survey123 smartphone App

## Aim

-  to educate and create public awareness about IAS
-  involve the public in reporting IAS locations
-  collect IAS distribution data
-  provide an opportunity to easily and quickly obtain and use the collected IAS data



<http://bit.ly/invazivs>



Baltā robīnija

Izpētīt



Ošlapu kļava

Izpētīt



Adataināis dzelongurķis

Izpētīt



Austrumu dižpērkone

Izpētīt

 Jā

 Nē

### Invasīvās augu sugas

Sugas nosaukums\*

-Lūdzu, izvēlieties-

### Apraksts

Īss atradnes raksturojums, piezīmes.

1500

Daudzuma vienība\*

eksemplāri kvadrāmetri Cits

### Sugas novērojumi kartē

Invasīvās augu sugas

1 no 50

OBJECTID	49
Sugas nosaukums	adataināis dzelongurķis
Apraksts	08.08.2020
Daudzuma vienība	eksemplāri
Daudzums	1
Novērojuma datums	8.08.2020. 03:00
Datu avots	Dabasdati.lv
Ieraksta statuss	Apstiprināts

Lai izpētītu datus sānu sadaļā, aktivizējiet atlasē rīku, nospiežot uz bultiņu kreisajā augšējā stūrī

Suga: adataināis dzelongurķis

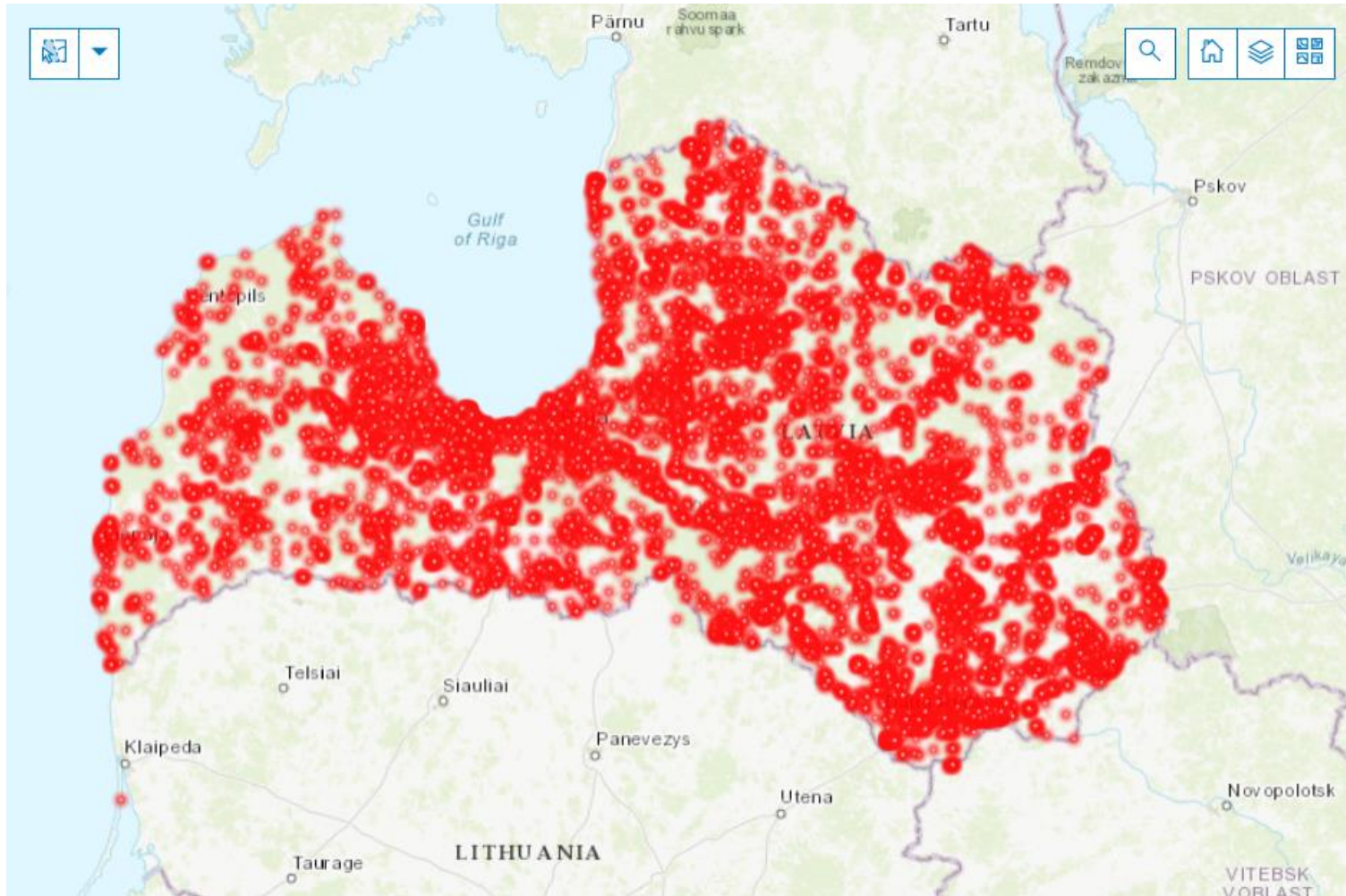
filtrēt...

adataināis dzelongurķis

Atiestatīt Noņemt izvēli visam



# Reports on IAS locations the website «IAS Manager» since 06.05.2021.



6146 Reports (on 21.09.23.)

- Plant species – 4900
  - Heracleum sosnowskyi (2308)
  - Solidago canadensis (538)
  - Lupinus polyphyllus (262)
- Animal species – 1246
  - Arion vulgaris (409)
  - Neovison vison (291)
  - Nyctereutes procyonoides (117)

# Action C.5.2. Guidelines for inclusion of species into the list of invasive alien species in Latvia

## National list - context

- ❖ In the national list only one species - hogweed *Heracleum sosnowskyi*.
- ❖ Indirectly the IAS animals species are tackled in the Hunting regulation - "*species not characteristic of Latvian fauna or invasive species - Mustela vison, Nyctereutes procyonides, Dama dama, Ovis orientalis, Cervus nippon, Procyon lotor, Myocastor coypus Molina, Marmota bobak* - are allowed to be hunted all year round"



# Guidelines for the national list of IAS

- ❖ Guidelines for the development of national list of IAS developed, including risk assessment
- ❖ After the evaluation from 74 plant species and 84 animal species - 62 plant species and 33 animal species are considered invasive in Latvia
- ❖ Working group established (all involved state institutions)
- ❖ Work on the legislation part - ongoing



*Acer negundo*

*Acer pseudoplatanus*

*Allium paradoxum*

*Amelanchier spicata*

*Aronia prunifolia*

*Asclepias syriaca*

*Aster salignus*

*Bidens frondosa*

*Bunias orientalis*

*Campylopus introflexus*

*Caragana arborescens*

*Celastrus orbiculatus*

*Corispermum pallasii*

*Cotoneaster lucidus*

*Echinocystis lobata*

*Elaeagnus argentea*

*Elodea canadensis*

*Elodea nuttallii*

*Epilobium adenocaulon*

*Galega orientalis*

*Gypsophila paniculata*

*Helianthus tuberosus*

*Heracleum*

*mantegazzianum*

*Heracleum persicum*

*Heracleum sosnowskyi*

*Hippophae rhamnoides*

*Impatiens glandulifera*

*Impatiens parviflora*

*Lactuca tatarica*

*Ligustrum vulgare*

*Lonicera caprifolium*

*Lupinus polyphyllus*

*Malus domestica*

*Parthenocisus quinquefolia*

*Petasites hybridus*

*Populus alba*

*Populus longifolia*

*Prunus cerasifera*

*Quercus rubra*

*Reynoutria japonica*

*Reynoutria sachalinensis*

*Robinia pseudoacacia*

*Rosa pimpinelifolia*

*Rosa rugosa*

*Rudbeckia hirta*

*Rumex confertus*

*Salix daphnoides*

*Sambucus nigra*

*Sambucus racemosa*

*Solidago canadensis*

*Solidago gigantea*

*Sorbaria sorbifolia*

*Spiraea alba*

*Spiraea chamaedryfolia*

*Spiraea latifolia*

*Spiraea x billardii*

*Spiraea x rosalba*

*Swida alba*

*Swida sericea*

*Symphoricarpos albus*

*Telekia speciosa*

*Veronica filiformis*

*Koenigia polystachya*



*Agrilus planipennis*

*Aprocerus leucopoda*

*Arion vulgaris*

*Astacus leptodactylus*

*Branta canadensis*

*Castor canadensis*

*Cervus nippon*

*Dama dama*

*Dikerogammarus villosus*

*Eriocheir sinensis*

*Dreissena polymorpha*

*Faxonius limosus*

*Harmonia axyridis*

*Krynockillus melanocephalus*

*Leptoglossus occidentalis*

*Nyctereutes procyonoides*

*Ondatra zibethicus*

*Neovison vison*

*Obesogammarus crassus*

*Pacifastacus leniusculus*

*Perccottus glenii*

*Oryctolagus cuniculus*

*Procambarus clarkii*

*Procambarus virginialis*

*Procyon lotor*

*Paramysis lacustris*

*Pseudorasbora parva*

*Pelodiscus sinensis*

*Pontogammarus robustoides*

*Potamopyrgus antipodarum*

*Tamias sibiricus*

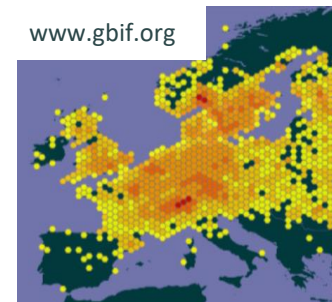
*Trachemys scripta*

*Trichoferus campestris*

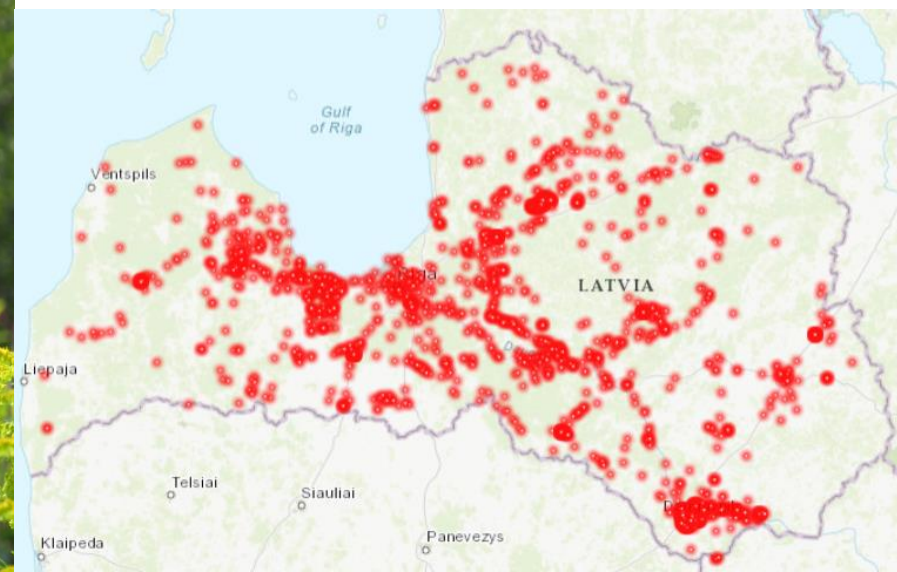


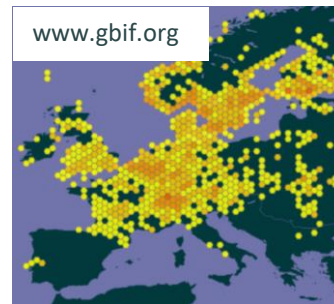
LATVIANATURE

[www.gbif.org](http://www.gbif.org)



# *Solidago canadensis*





# *Arion vulgaris*





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# Action C.5.3. Development of early detection and rapid eradication systems for invasive alien species



# System for early detection and rapid eradication

- ✓ Working group established (all involved state institutions and municipalities)
- ✓ Scheme (authorities, responsibilities, informing) for early detection and rapid eradication developed
- ✓ *IAS Manager* as part of the system
- ✓ Work on the legislation part - ongoing

# Action C.5.4. Development of guidelines for management plans for invasive alien species

# System for early detection and rapid eradication

- ❖ Guidelines for development of management plans developed
- ❖ Management plan includes – description of species, necessary actions (including responsibilities, budget, timetable, description of known eradication and control methods)
- ❖ Development of management plans for 2 pilot species – ongoing.
- ❖ Information about eradication methods included in the *IAS Manager* - ongoing
- ❖ Work on the legislation part – ongoing.



# Action A.6.1: Survey on invasive alien species

# The survey

## Target auditory (respondents)

- ▼ Private landowners and managers

## The aim – to learn about

- ▼ the general knowledge about and attitude towards IAS
- ▼ the motivating or preventing factors (for involvement in management actions)
- ▼ the previous experience regarding eradication of IAS (new methods)

## The format

- ▼ Section for each aim and respondent profile, around 20 min for completing
- ▼ Both online and in-persons surveys in seminars for the target auditory

# Results

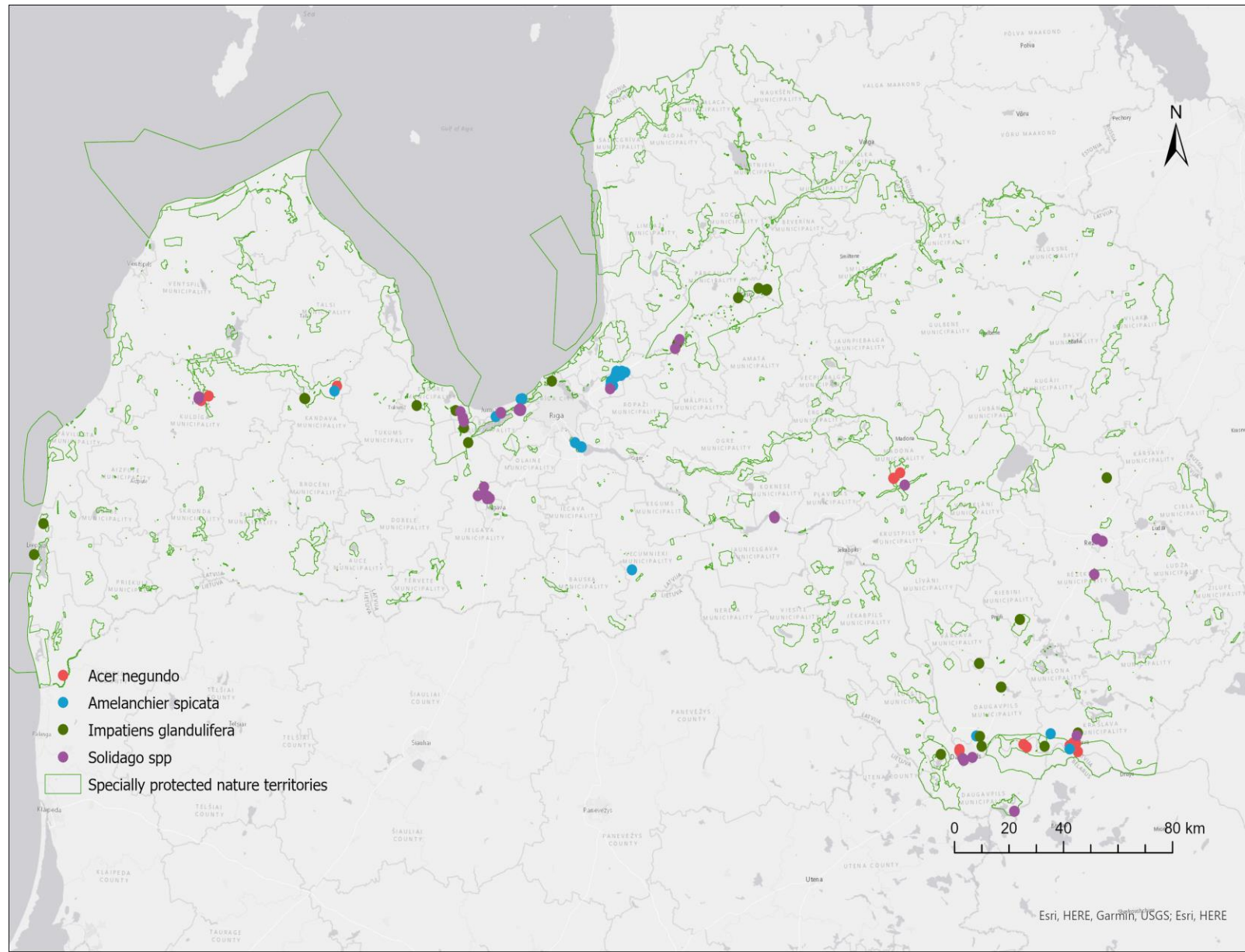
- ✓ 503 forms (359 usable for analysis)
- ✓ Respondents evaluated their knowledge about IAS as insufficient, but meanwhile rather large portion of them see IAS as significant problem (*level of education impacts the results*)
- ✓ 52% of the respondents had surveyed their properties to find out the occurrence of IAS
- ✓ The main reasons that hinder the eradication of invasive plants - the lack of time (62%), funding or suitable equipment (61%), action in the neighboring territories (58%) and information (52%)
- ✓ Possible motivational mechanisms - good practice from other land managers (82%), co-financing (82%), real estate tax reliefs during the implementation of eradication measures (80%) and specialist consultations (80%), practical information materials (74%).
- ✓ Almost half of respondents indicated that the eradication of IAS was primarily the responsibility of landowners (including state and local governments)
- ✓ 49% indicated that the information about invasive plant species was insufficient



# Actions

## C.6.2 testing of new methods for eradication of IAS

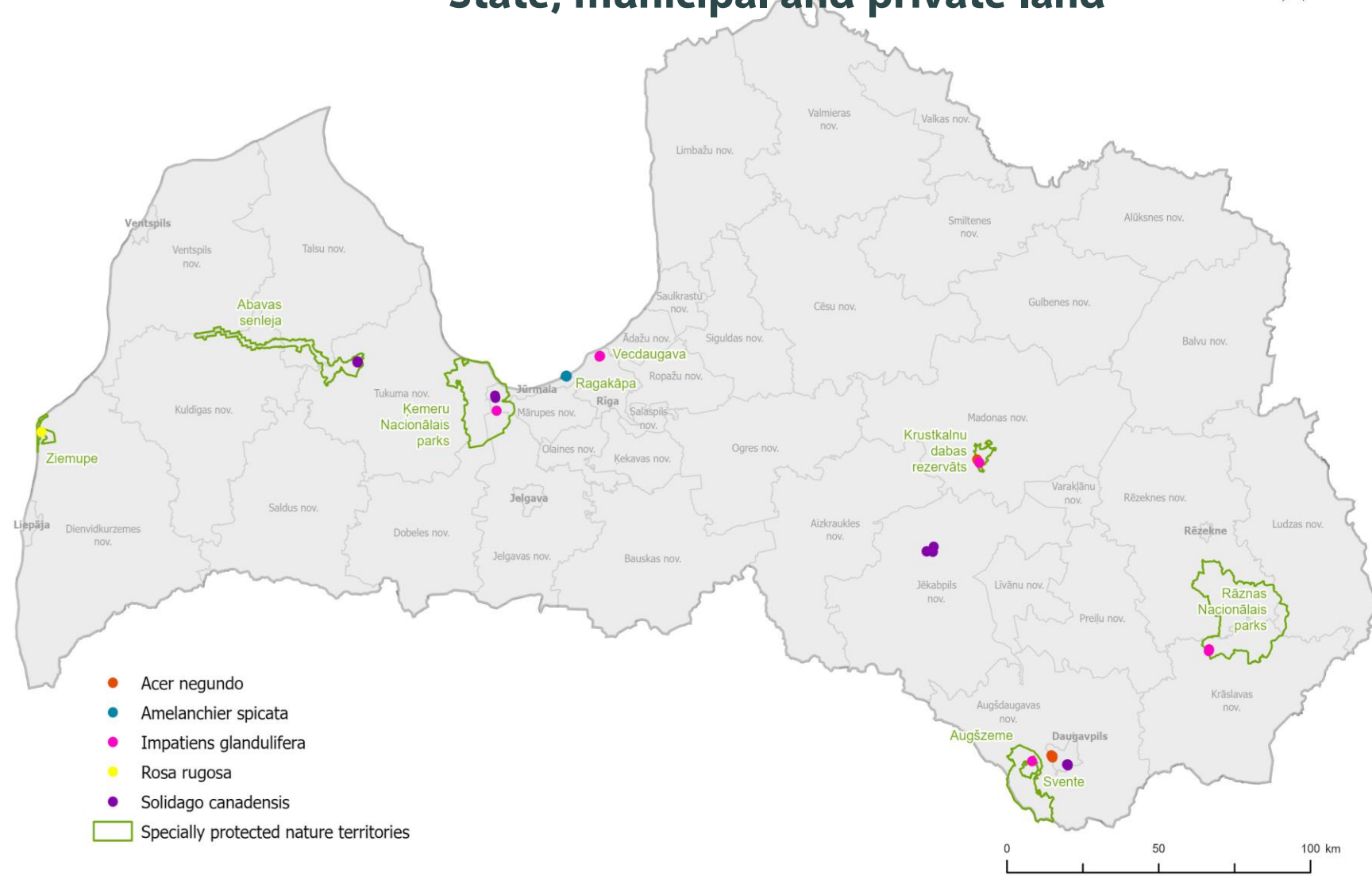
### D.1.4. monitoring of the results



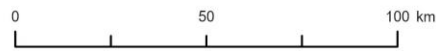
- The first step – criteria for selection of pilotsites
- Initially 64 sites selected for further analysis (including field visits)
- Simultaneously – work on selection of methods
- Permits and expert opinions
- Procurements

# 13 pilotsites ~ 100 ha

State, municipal and private land



- Acer negundo
- Amelanchier spicata
- Impatiens glandulifera
- Rosa rugosa
- Solidago canadensis
- Specially protected nature territories



Datu avoti: DDPS OZOLS, Invazīvo sugu pārvaldnieks, VZD



Boxelder maple  
*(Acer negundo)*



Dwarf serviceberry  
*(Amelanchier spicata)*



Himalayan balsam  
*(Impatiens glandulifera)*



Japanese rose  
*(Rosa rugosa)*



Canadian goldenrod  
*(Solidago canadensis)*

# Canadian goldenrod (*Solidago canadensis*)

- Testing carried out in 4 locations, total area – 22,76 ha;
- Methods:
  - Frequent mowing – 2 times per season;
  - Root milling;
  - Seeding of competitor species;
  - Covering stands with plant mulch;
  - Pulling out plants with hands.





# Boxelder maple (*Acer negundo*)

- Testing carried out in 2 locations, total area – 22,62 ha;
- Methods:
  - Cutting and root milling;
  - Trunk ringing;
  - Applying stumps with chemical plant protection agents;



# Himalayan balsam (*Impatiens glandulifera*)

- Testing carried out in 6 locations, total area – 23,75 ha;
- Methods:
  - Treatment with hot water/steam;
  - Grazing with ponies;
  - Pulling out plants with hands.



# Dwarf serviceberry (*Amelanchier spicata*)

- Testing carried out in one location, total area – 32,68 ha;
- Methods:
  - Pulling out shrubs using small tractor;
  - Pulling out shrubs with hands or hand tools;
  - Frequent cutting – multiple times per season;
  - Applying stumps with chemical plant protection agents.





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# Thank You



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