

# National implementation: Invasive Alien Species in the Arctic Region of Finland

## Arctic Biodiversity Congress

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Photo: Terhi Rytteri



Photo: Jouni Tulonen

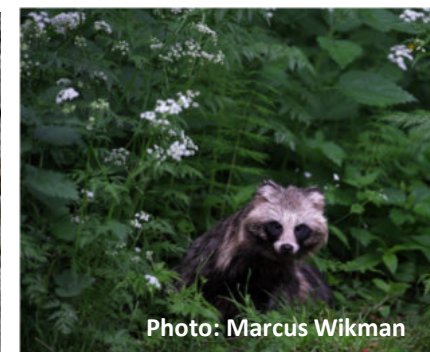


Photo: Marcus Wikman

- ARIAS-strategy and Finland:  
**WHAT** is the relationship?  
**WHY** this national implementation?
- **WHICH** invasive alien species pose the greatest risk in the Arctic Finland?  
**WHICH** pathways?  
**WHAT** kind of threats and impacts these IAS cause in the Arctic Finland?
- **WHICH** further national key actions are needed in Finland?
- **WHAT** kind of proposals for collaboration do we suggest?



Photo: Ministry of Agriculture and Forestry



Photo: Bjarni Diðrik Sigurðsson



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# Arctic Region, ARIAS and Finland

- Arctic Invasive Alien Species (**ARIAS**) Strategy and Action Plan (2017): one of priority products for Finland's international IAS-policy.
  - ARIAS: "**We have unique opportunity in the Arctic.**"
- ➔ **More information** is needed. Need for **baseline data** on IAS, pathways and impacts **in Finland's Arctic region**:
- Finland has launched a national project to begin with the implementation of the ARIAS Strategy and Action Plan
    - 2nd goal of the ARIAS Action Plan: To improve the knowledge base for well-informed decision making
    - Priority Action 2.1: Identify and assess
      - a) the invasive alien species and pathways that pose the greatest risk; c) what kind of impacts of invasive alien species there are.
  - Also implementing the **Arctic Biodiversity Assessment** recommendations:  
Reduce the threat of invasive alien/non-native species to the Arctic....

➔ **First baseline data available.**

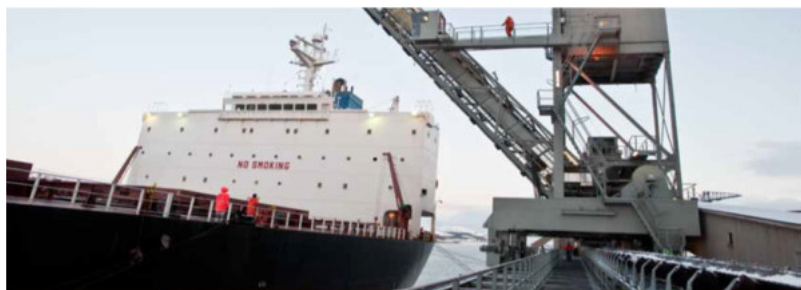


# Major pathways posing Finland's Arctic Region

- Tourism
- Trade and transport
- Settlements
- Aquaculture
- Escapes
- Intentional releases
- Reindeer feeding





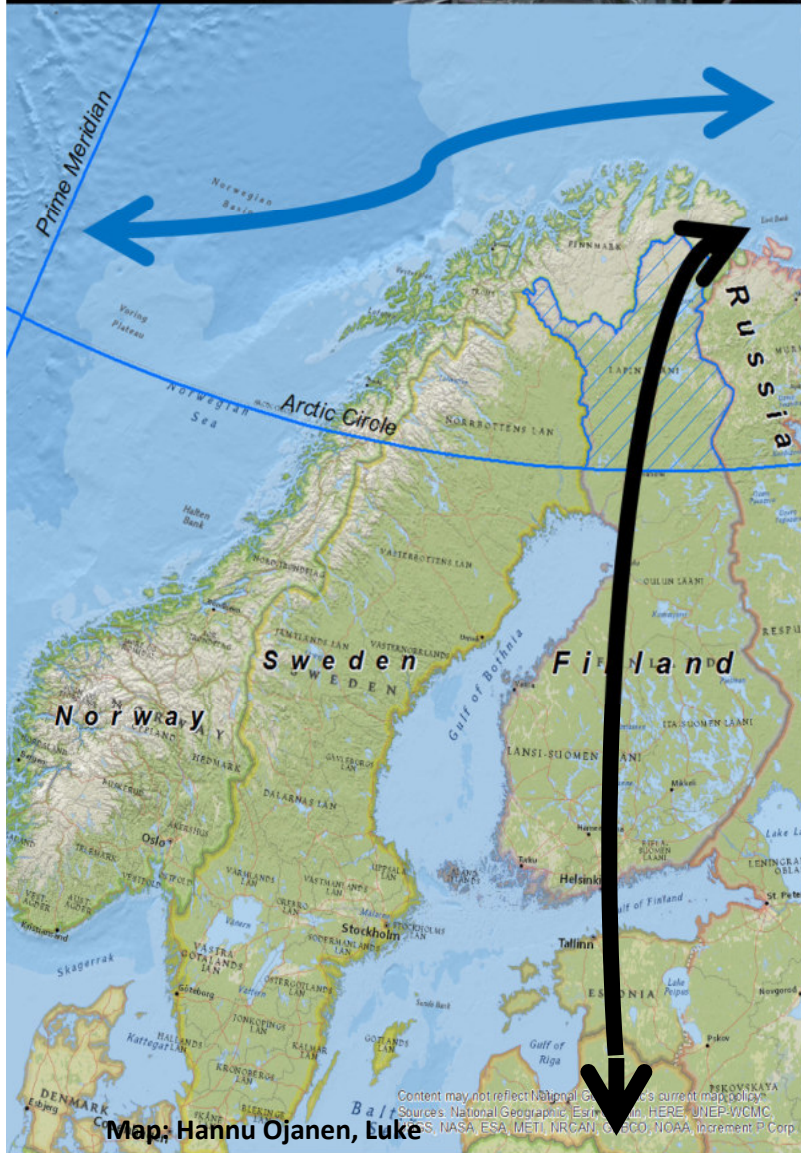


# New pathways – new risks

**Northeast Passage**  
**Railroad to Arctic Ocean**

➤ **Increased trade and tourism**

- Risk of **pine wood nematode** (PWN, *Bursaphelenchus xylophilus*,)
- Risk of spreading other wood boring insects *Agrilus*, *Curculionidae* on *Betula*



Map: Hannu Ojanen, Luke

Photos: Region of Northern Lapland



# Garden lupin



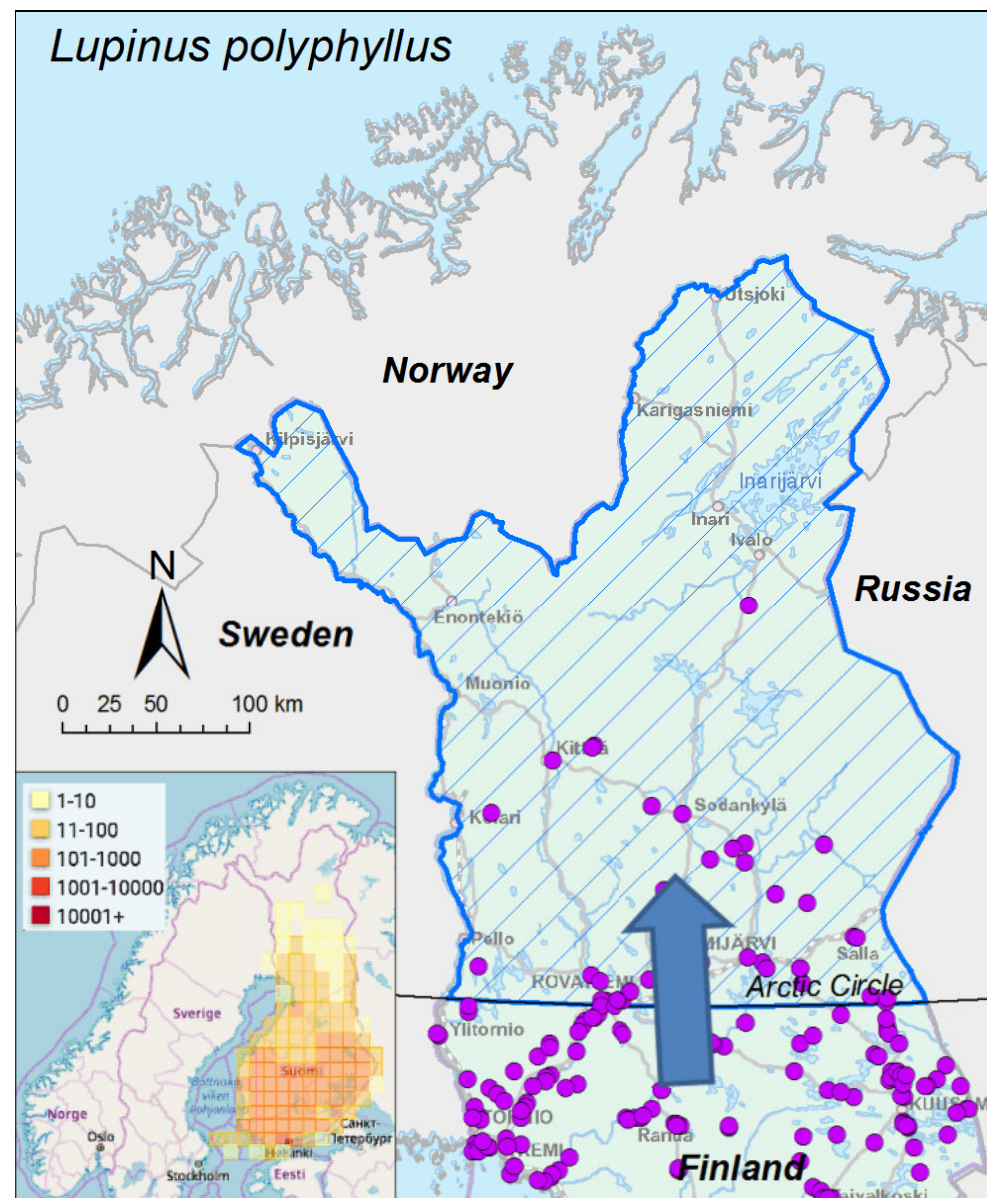
Spreads from south further to the north all the time.

## Risks

- Eutrophicates the habitat.
- Competes and affects severely the original local species, vegetation, habitats and landscapes...

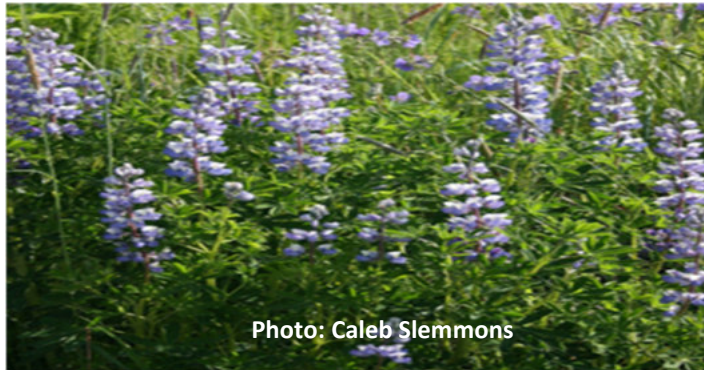
## Proposal for action

- Awareness rising!
- Eradication; still possible in the Arctic region!
- Include in the national IAS legislation!



Data source: laji.fi Map: Hannu Ojanen, Luke





➡ Spreads from north to the Arctic Region of Finland.

## Risks

- Eutrophicates the habitat.
- Competes and affects severely the original local species, vegetation, habitats and landscapes...

## Proposal for action

- Awareness rising!
- Eradication; still possible in the Arctic region!
- Include in the national IAS legislation!



# Raccoon dog

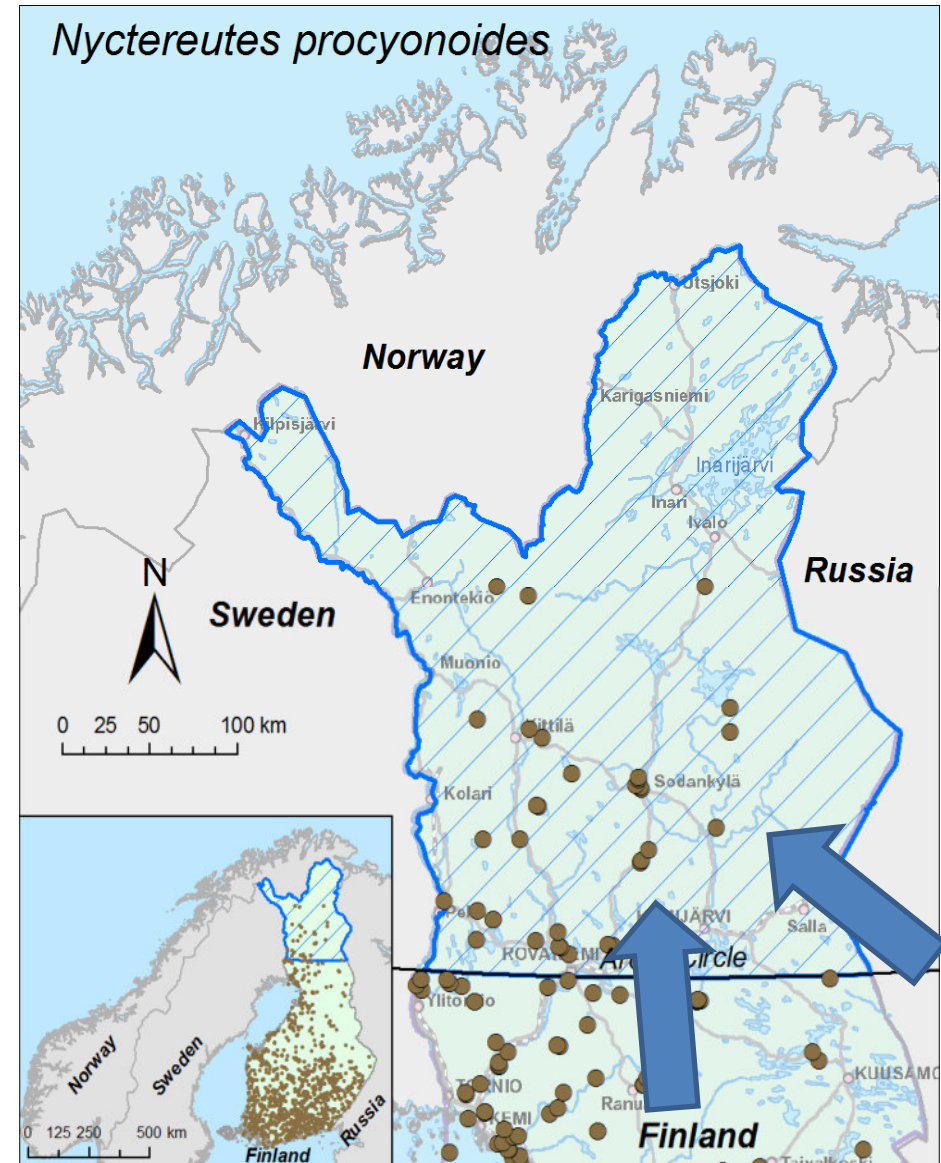
➡ Spreads further to the north all the time.

## Risks

- Carrier and vector of many diseases and parasites (rabies virus, echinococcosis).
- Locally, particularly in island habitats, affects water fowl species.

## Proposal for action

- Hunting in the Arctic Region.
- Reduce the risk of rabies by distribution of bait vaccine twice a year.
- Already included in the EU IAS legislation.



Data source: Oma riista, Luke Map: Hannu Ojanen, Luke





# Pink salmon

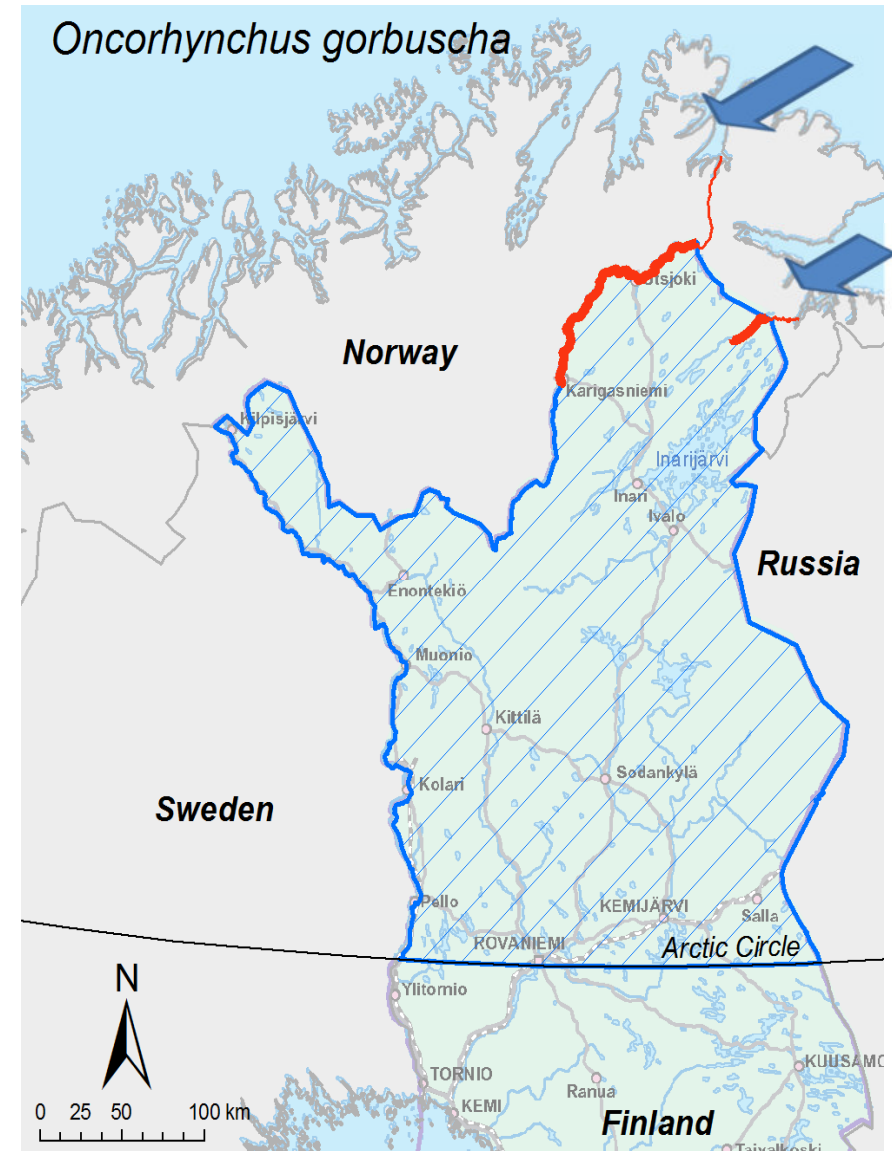
➔ Spreads from Northern Atlantic / Arctic Ocean to the rivers of Arctic Finland

## Risks

- Potential risk for the original migratory fish species in the region, eg. Atlantic salmon

## Proposal for action

- Urge for international monitoring of spreading, breeding and especially the risk of spreading diseases.
- Urge for international open data, e.g. through Clearing House Mechanisms.



Data source: Luke Map: Hannu Ojanen, Luke



# Crayfish plague

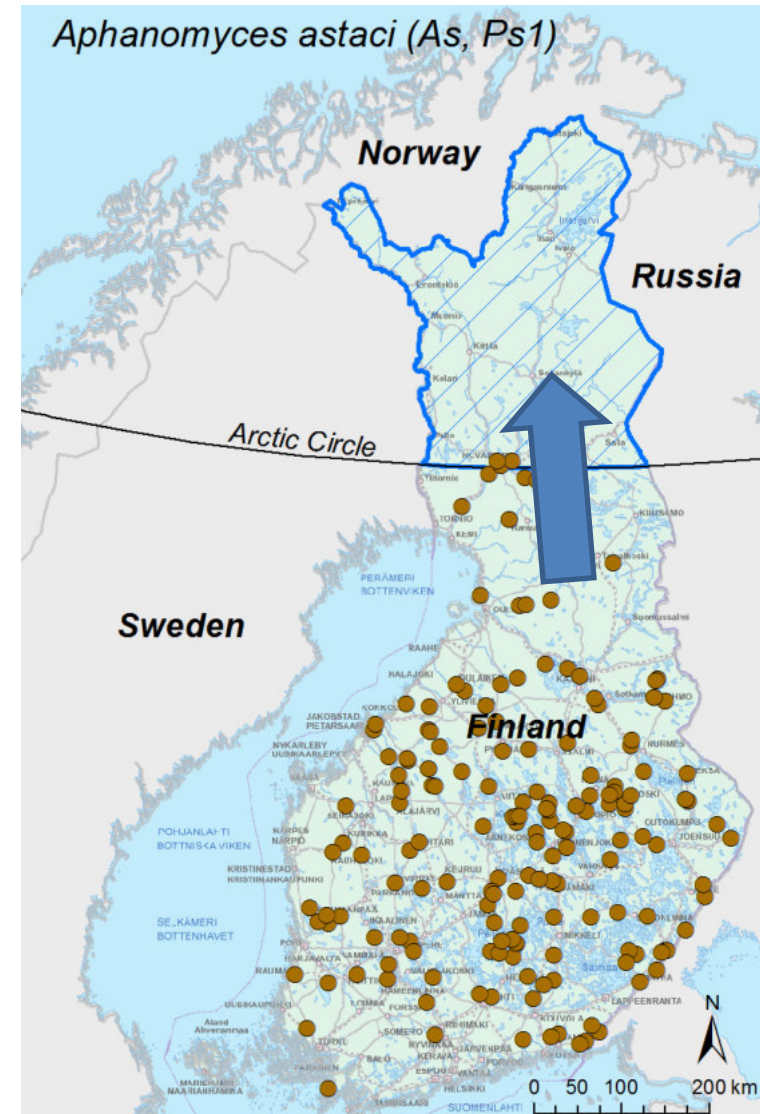
➔ Spreading from south to the Arctic Region.

## Risks

- Parasitic disease originating in signal crayfish devastating to original noble crayfish.

## Proposal for action

- Awareness rising! Cleanliness of fishing equipment, gear and tools.



Source: Luke Map: Hannu Ojanen, Luke



# Proposals of key actions and collaboration

## Further national key actions needed in Finland:

### ➤ Raise awareness and share open data of the IAS identified in this study:

- Urge to prepare of sub-web-pages on Arctic IAS issues in the **Finnish National Invasive Alien Species Portal** [www.vieraslaajit.fi](http://www.vieraslaajit.fi) (ARIAS 2.4)
- Urge to **report and monitor** the IAS in the Arctic Region of Finland. (ARIAS 2.3)

### ➤ Urge to act:

- Make use of the national **legislation** to foster the actions, management and prevention. (ARIAS 1.4)
- Include Arctic Biodiversity actions in the **National Biodiversity Strategy and Action Plan**, including IAS actions in the Arctic Region. (ARIAS 1.2)

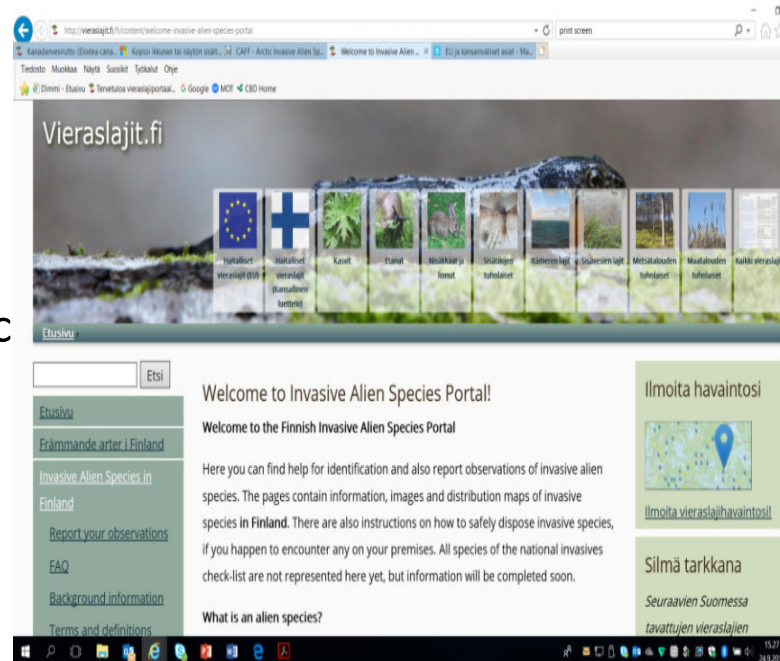


Photo: Pekka Väisänen

# Proposals for collaboration

## Proposals for collaboration between the Arctic partners and stakeholders:

### ➤ **Raise awareness:**

- Urge to develop **targeted communications** and outreach. (ARIAS 1.1)
- Urge to **raise Arctic region's unique feature** in all international efforts, agreements and conventions (e.g. CBD), institutional frameworks. (ARIAS 1.4)
- Urge to **share data and best practices**: Facilitate full, timely, and open sharing data and other information relevant to Arctic IAS. (ARIAS 2.4)

### ➤ **Improve the knowledge and the capacity to act:**

- Urge to **prepare and share international risk assessments and analysis**, including potential risks concerning the new pathways towards the Arctic Regions. (ARIAS 2.2)







Photo: Jussi Koivuniemi



Photo: Seppo Hellsten



Photo: Terhi Rytteri

Please visit for more information: [www.vieraslaajit.fi](http://www.vieraslaajit.fi)

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Maps: Hannu Ojanen

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Photo: Terhi Rytteri



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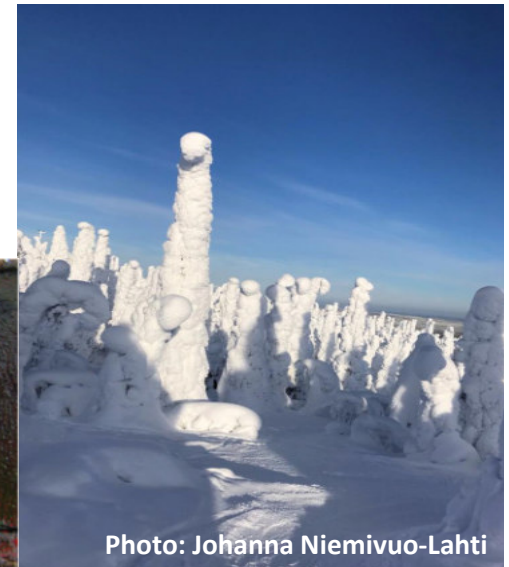


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