



Eradication of Japanese Rose

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Japanese Rose

Basic facts

Even a small plant
contributes to spreading
through its rose hips!

- Native to Eastern Asia
- Introduced to Europe via Great Britain in 1796.
- Common ornamental plant in gardens and cities as well as along roads.
- First observations of feral roses in Sweden 1918 outside Stockholm and in Finland 1919 outside Helsinki. Today we find roses along all the shores of the Baltic sea, most in the southern parts.
- In Kvarken archipelago the first observations of feral roses were made in the end of the 20th century. In 30 years, the number has increased from a few to hundreds.

(Thanks to INSPECT and other projects the number is smaller again ☺)

- Effective spreading: spreading happens faster as the number of roses grow, because they spread in all directions when seeds and rose hips are dispersed with water and birds. It also spreads with its root stems.
- Japanese rose knows no borders and simultaneous eradication in both Sweden and Finland is important.



Japanese Rose

What's the problem?

Japanese rose is considered a very harmful invasive plant in Europe. Spreading of Japanese rose means a decrease in biodiversity.

WHY?

- Japanese rose outcompetes native flora and fauna; everywhere a Japanese rose grows is a place where native species don't grow, and where native animals and plants will not find food or a place to live. This is probably true for soil micro-organisms as well.
- Without actions spreading of Japanese rose may lead to altering of habitats; shore meadows, heaths, sandy beaches and even stony shores will turn into wide stands of Japanese rose.

Finnish law imposes landowners to eradicate Japanese rose, in Sweden it is strongly recommended.

Combating Japanese rose can be expensive. Not to combat will be far more expensive and will lead to loss of both nature and money.





Japanese Rose

The method testing

The aim with the tests was to find out the most cost effective and suitable methods for eradication of Japanese rose in different environments.

Some of the methods were known to have effect. We wanted to know if we could do it a little bit faster, easier or cheaper without losing effect.

The eradication time has been too short for 100 % permanent eradication with these methods, but it looks good so far.

We started with 320 sites of Japanese rose, now 75 % are eradicated and the rest are barely alive.



Japanese Rose

The project area

Metsähallitus: Valsörarna

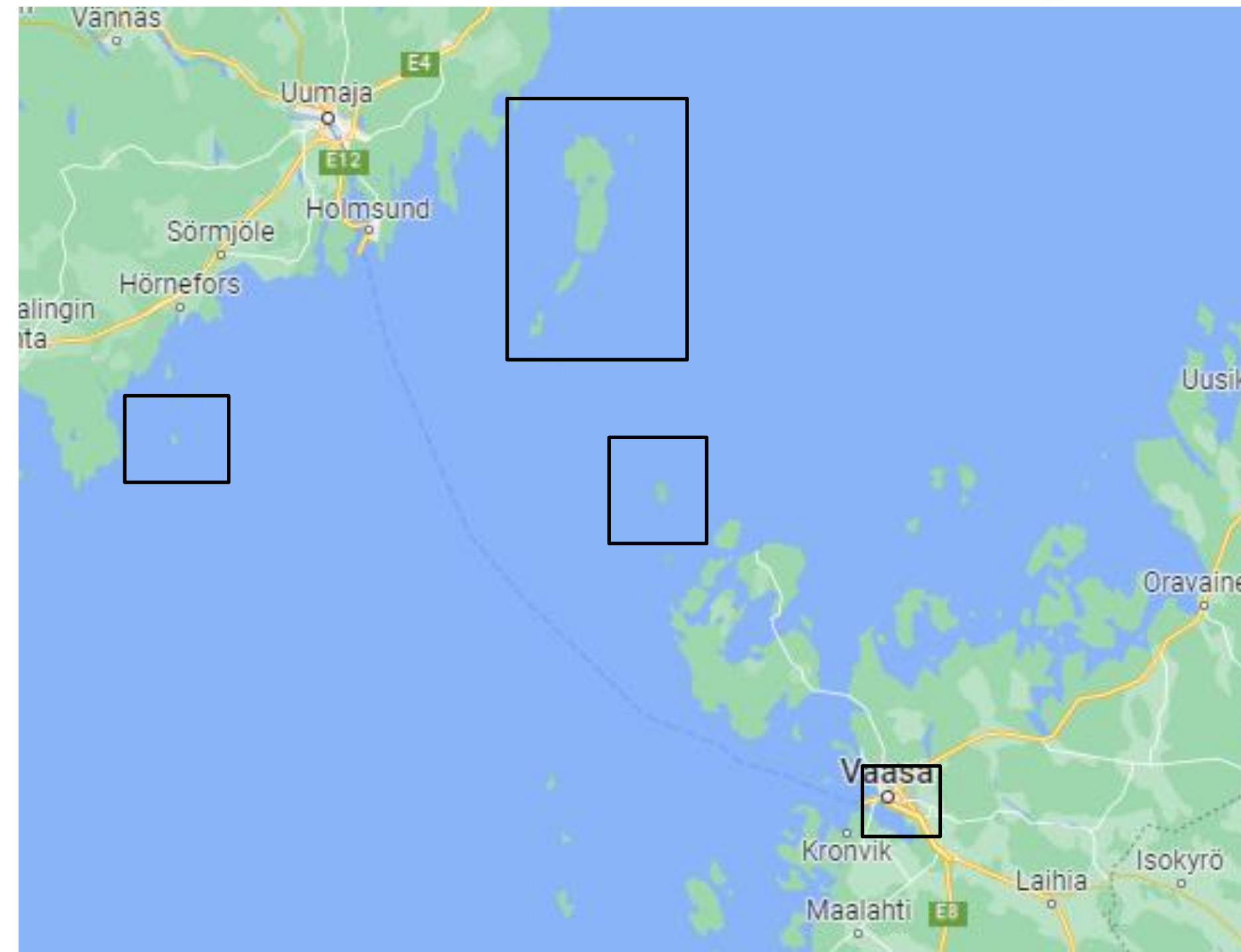
- Outer archipelago, nature reserve
- 250 sites found, method testing on 73 sites, all combated
- Methods used: three types of starvation, cutting down, herbicide

Länsstyrelsen: Holmön och Snöan

- Outer archipelago, nature reserve
- 35 sites (the island of Holmön, the island of Snöan, mainland Snöan)
- Methods used: cutting, manual digging, covering

The city of Vaasa: Vaasa

- Urban environment, road and shore environments
- 28 sites of which 26 have been combated (2 will be removed due to building)
- Methods used: cutting, manual digging, cutting + steam machine, starvation



Methods

- Starvation – cutting all leaves
- Starvation 1/3 – cutting the branched tops and removing the remaining leaves
- Starvation plus ring barking/girdling
- Measures need to be repeated many times



Conclusions

Rekommended when

- Many visits are possible

Suitable for

- All sites
- Talko

Worth to note

- When first starting a starvation effort, cutting the branched tops can be recommended: it saves a lot of time which is valuable as the starvation method is very time-consuming.
- The extra effort with girdling doesn't pay it back in effect – not recommended.
- A cheap method – all you need is a pair of gloves and a hand pruner. Coasts come with transports to distant sites.



Methods

- Cutting down to the base
- Cutting + steam machine
The roses were cut down once or twice, then root shoots were treated with hot steam 1-4 times



Conclusions

Cutting down to the base

Recommended when

- Many visits are possible
- In forest areas

Suitable for

- All sites, especially large sites if clearing saw is used
- Hard and soft ground

Worth to note

- Cutting down to the base will result in lots of root shoots in the beginning – needs many treatments, at least three every year



Conclusions



Hot water/ steam machine

- affects only visible parts, not the root system. Effect comparable to starvation, but much more expensive



Methods

Herbicide

- Glyphosate – stronger solution
- Glyphosate – more diluted solution
- Glyphosate jelly on cut stems



Conclusions

Recommended when

- Few visits are possible
- The place is sensitive to disturbance

Suitable for

- When other methods are not possible
- Professionals

Worth to note

- Solution concentration has to be strong enough to have good effect with one application.
- Application on cut stems with glyphosate jelly did not have desired effect, probably due to the small amount of glyphosate.
- Monitoring is important! Seeds may germinate even after a few years.

Once we use herbicide, we want it to work well.



Methods

- Covering
 - Thick tarpaulin
 - Thin tarpaulin
 - Hessian*

* Hessian = jute, juutti

Hessian

- Needs to be densely woven
- Needs to be double folded
- Lasts 3-4 years

Thick tarpaulin

- Long lifetime



Thin tarpaulin

- Lasts 2-4 years, depending on quality of tarp and exposure to weather



Conclusions

Recommended when

- Few visits are possible
- Protected from waves

Suitable for

- Small to medium sized sites
- Hard and soft ground

Worth to note

- Small effort
- Covering must reach one metre outside the plant





Year 1 - start. One small plant, about 0,25 m² large



Year 1 - start. We have cut the plant down and covered it with double layer hessian



Year 3. The hessian is still intact. No side roots have been seen so we will remove the hessian next year, after the project have finished.

Methods

Manual digging



Conclusions

Method: Manual digging

Recommended when

- Few visits are possible

Suitable for

- Small and medium sized sites. Large sites on mainland if machine is used
- Soft ground

Worth to note

- Need at least two years for followup controls
- Many root shoots will be produced in the beginning as it is very difficult to dig up all root parts.



What we want instead ...



Thank you!

