





Ministry of Environment  
and Food of Denmark  
Nature Agency



# Mapping and fighting *Rosa rugosa*



# Problem



# Problem



# Problem



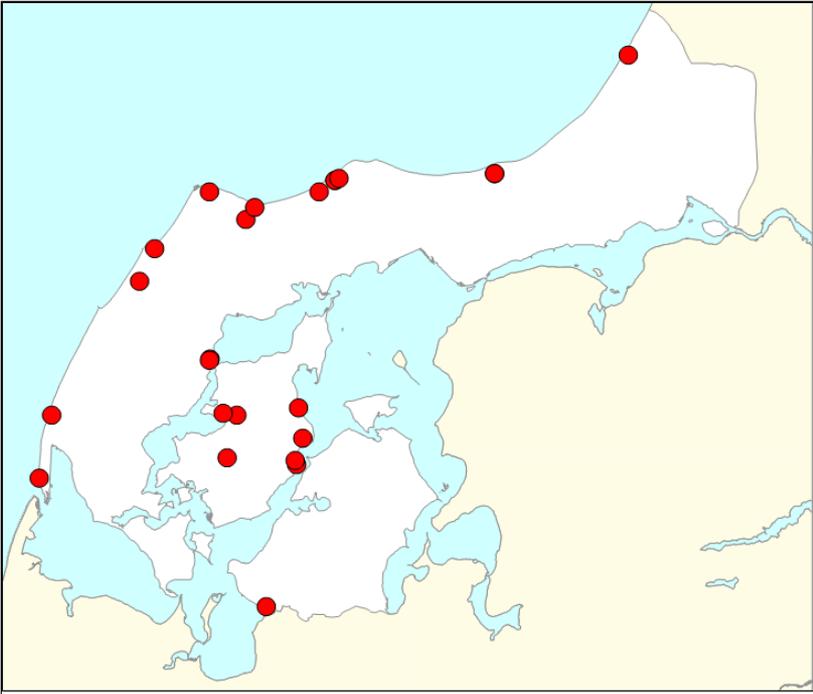
# Work area



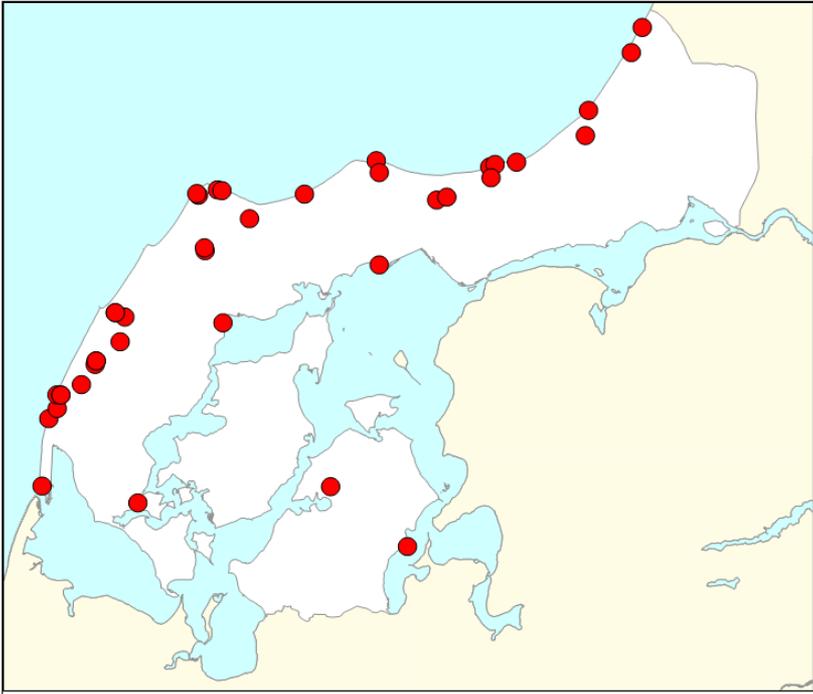
# Problem



Markfirben (*Lacerta agilis*)



Occurrence 1995



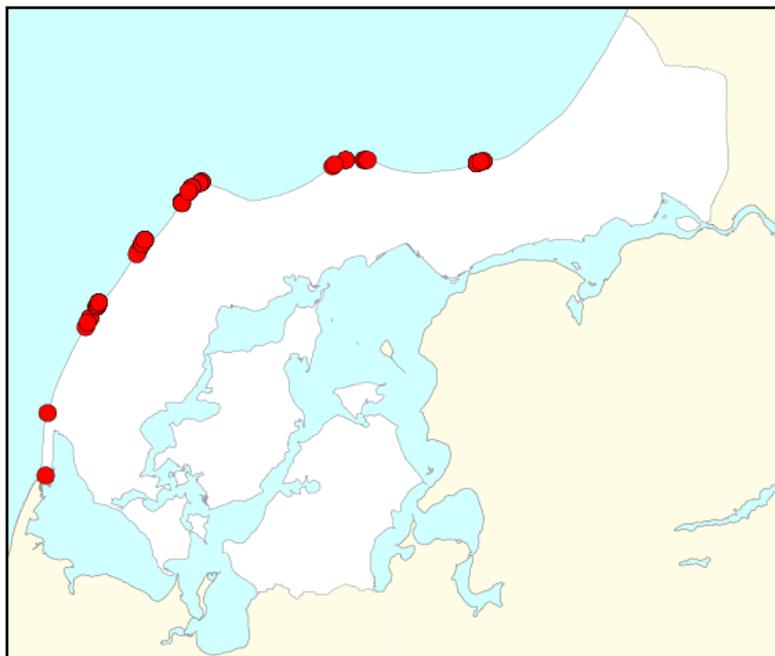
Occurrence 1995 - 2011



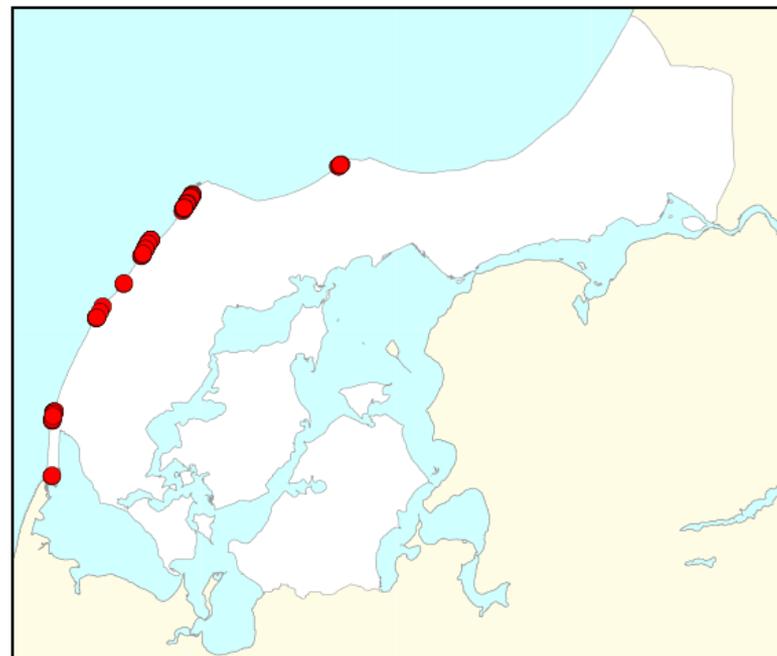
# Problem



## Strand-Snerle (*Calystegia soldanella*)



Forekomster før 1990

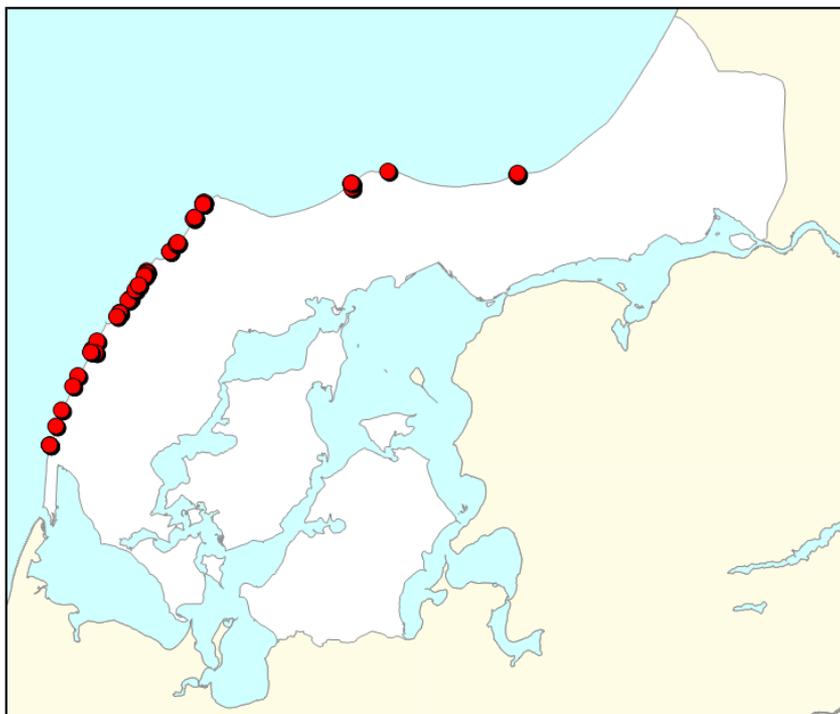


Forekomster 1990 - 2010

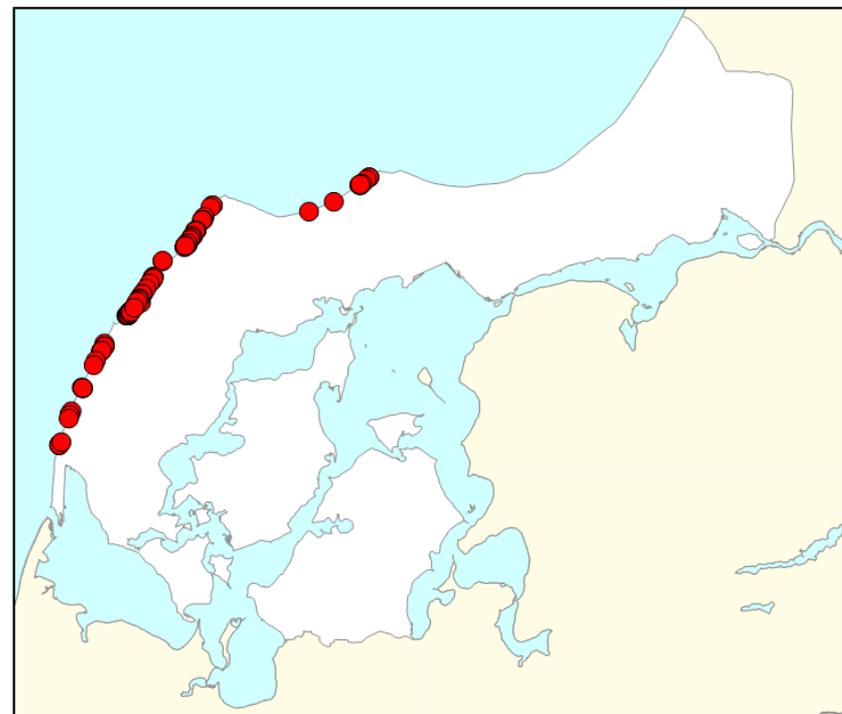


# Problem

## Skotsk Lostilk (*Ligusticum scoticum*)



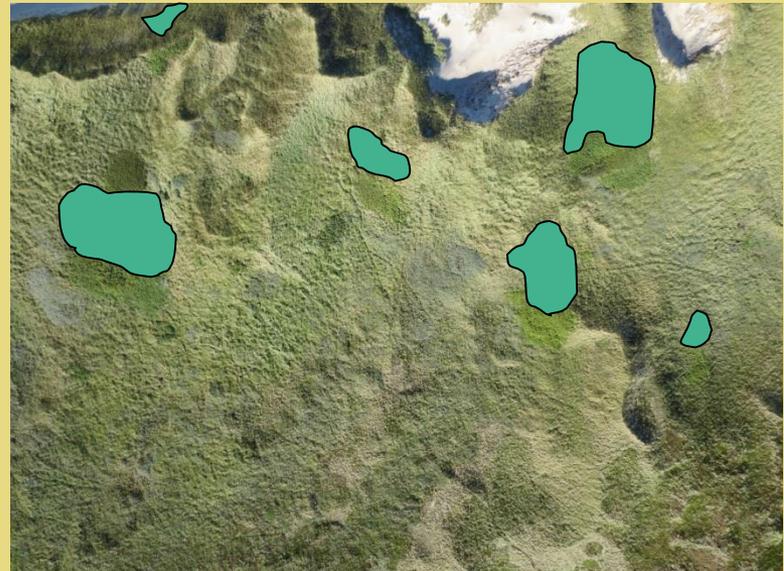
Forekomster før 1990



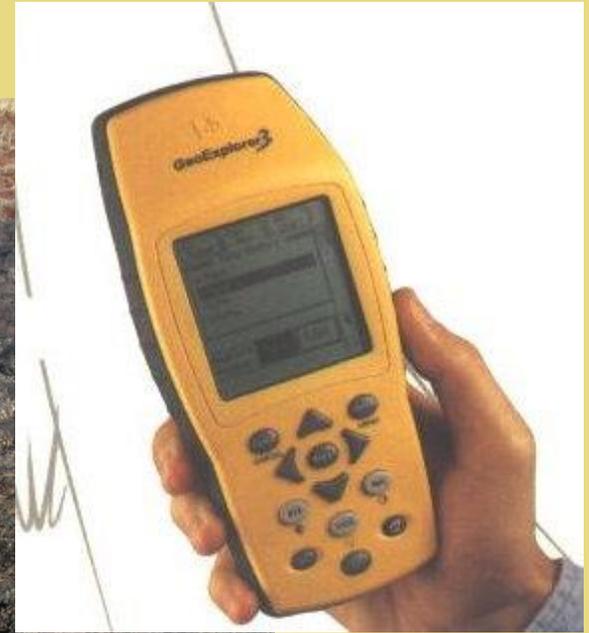
Forekomster 1990 - 2010



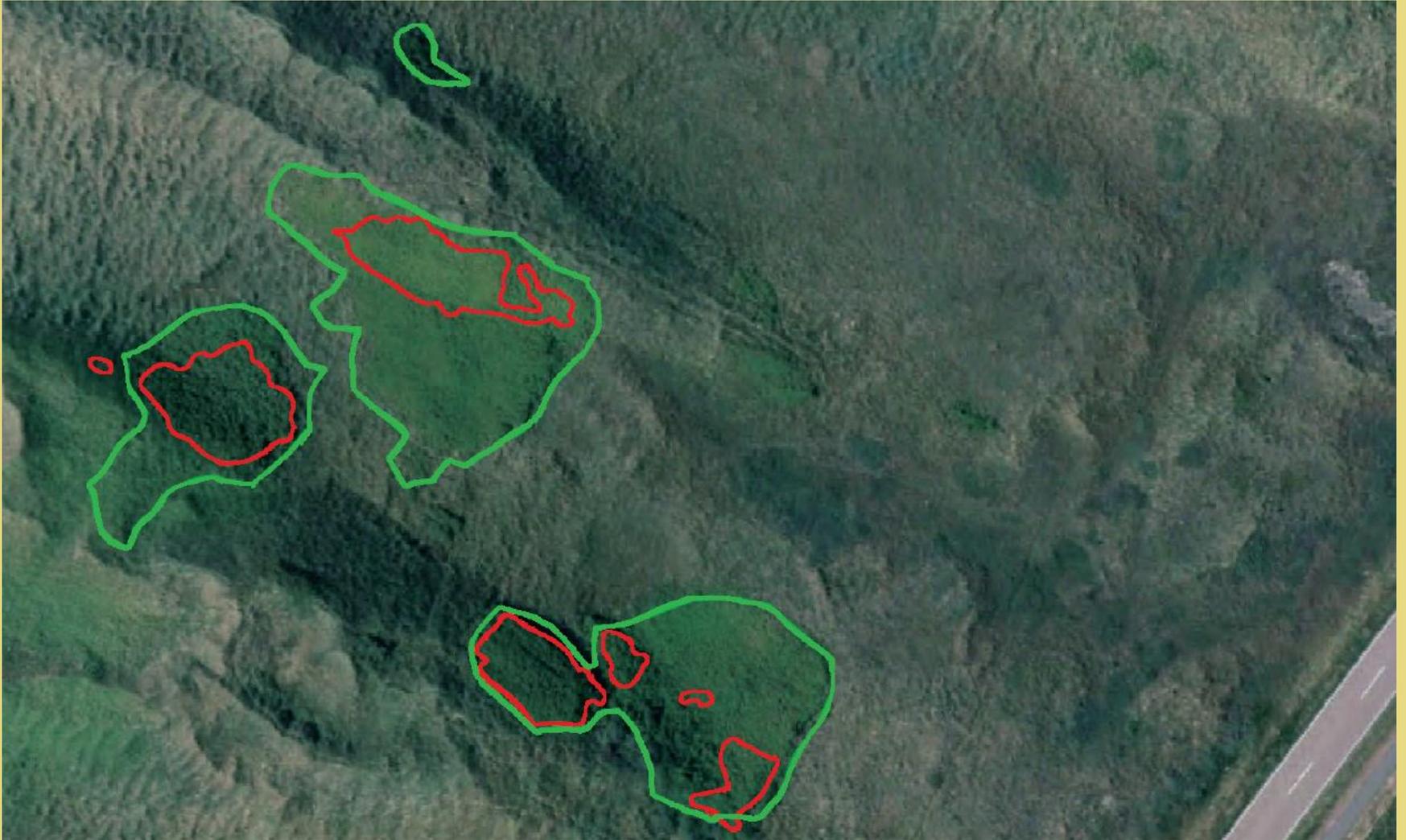
# Mapping - Spectral analysis



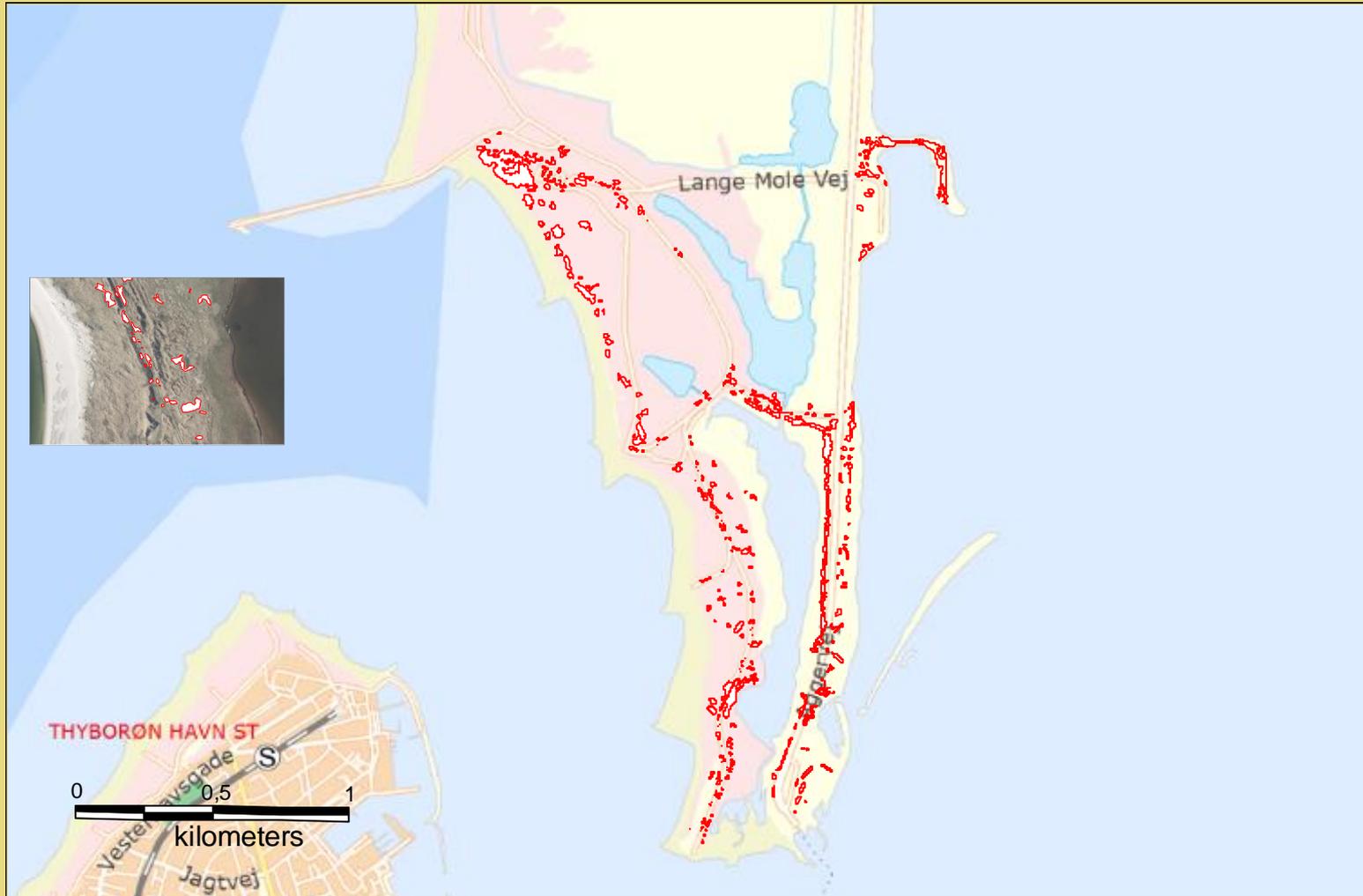
# Mapping – manuel GPS



# Mapping – Spectral / manuel GPS



# Mapping – example manuel GPS



# Figthing



Nedgravning  
ved Vangså US  
Excavation at Vangså



Tildækning  
ved Husby Klit US  
Ground cover at Husby K



Biorotor US  
Biorotor.



Afgræsning med geder  
på Vedersø Klit US  
Grazing using goats at  
Vedersø Klit.



Stødsmøring US  
Treating stumps



# Excavating

1 ha

**Oct 2016**



**Sept. 2017**



# Covering with plastic and weed mat

0,3 ha



# Milling

17 ha

**Aug 2016**



**Sept 2017**



# Grazing

25 ha



# Herbicide treatment



# Economy

## Cost per m2

### EURO

Metode <i>Method</i>	Områder <i>Areas</i>	Omkostninger pr. m <sup>2</sup> <i>Costs per m<sup>2</sup></i>
<b>Nedgravning</b> Excavation	Kallesmærsk Hede (nord for Børsmose Strand) Vangså (syd for Klitmøller)	5 - 18 kr. <sup>1</sup>
<b>Tildækning med fiberdug og plastik</b>	Husby Klitplantage (syd for Spidsbjerg Strand) Vangså	71 - 130 kr. <sup>2</sup>
<b>Biorotor</b> Biorotor	Husby Klitplantage (nord for Græm Strand) Nymindestrømmen (Gammelgab) Agger Tange	2,7 - 5,5 kr. <sup>3</sup>
<b>Afgræsning med geder</b>	Vedersø Klit	10 kr. <sup>4</sup>
<b>Stødmøring med glyphosat</b>	Vedersø Klit	12,2 kr. <sup>5</sup>
<b>Sprøjtning med glyphosat</b>	Vangså	15 -20 kr. <sup>6</sup>

1.5 - 2.4

9.5 - 17.5

0.4 - 0,7

1.3

1.6

2.0 - 2.7

### Methods and costs

The table provides details of which methods were used, and the costs incurred with combating *rosa rugosa*. We must emphasise that the costs given for the different methods are provisional. We do not know yet what the cost of combating regrowth will be over the next few years. The majority of the programmes were started in late 2016 or during 2017, which means that we have gleaned experience so far from 3 growth seasons.





## **The effect of Scots lovage and shore bindweed**

3 locations in Thy were used to register the effect of combating *rosa rugosa* on the presence of Scots lovage and shore bindweed. Our current conclusion is that both species have benefited from combating *rosa rugosa*, and have expanded their degree of cover. The reason can be ascribed to the availability of more open sand and less shadow from the roses.



# LIFE REDCOHA

Genopretning af sårbar natur langs Vestkysten  
/Restoration of Danish Coastal Habitats

