Managing Prunus serotina in the Amsterdam Dunes

LIFE+ project Source for Nature

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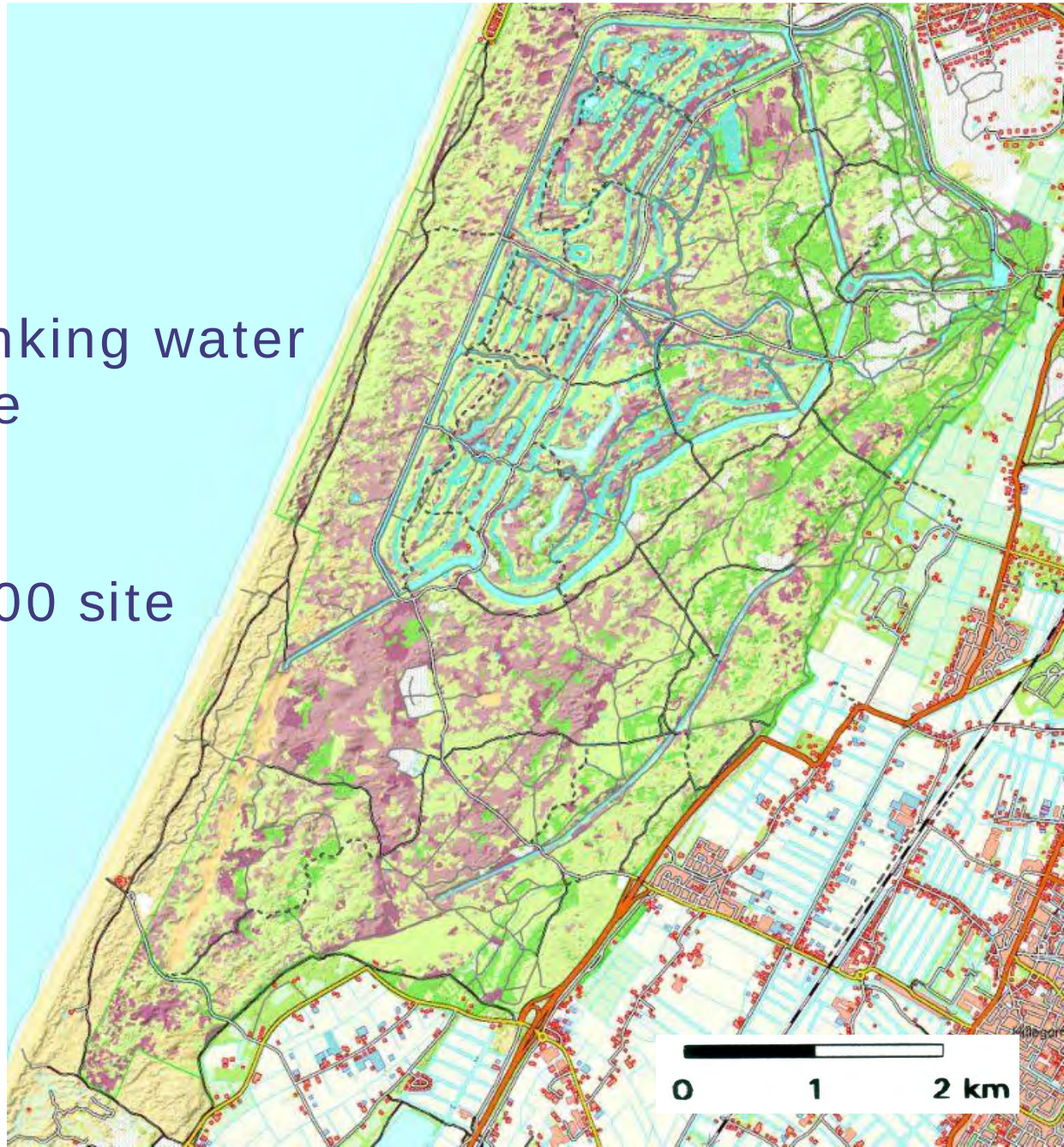
Overview

- Amsterdam Dunes
- History of Black Cherry
- Problem definition
- Management
- Results
- Conclusions

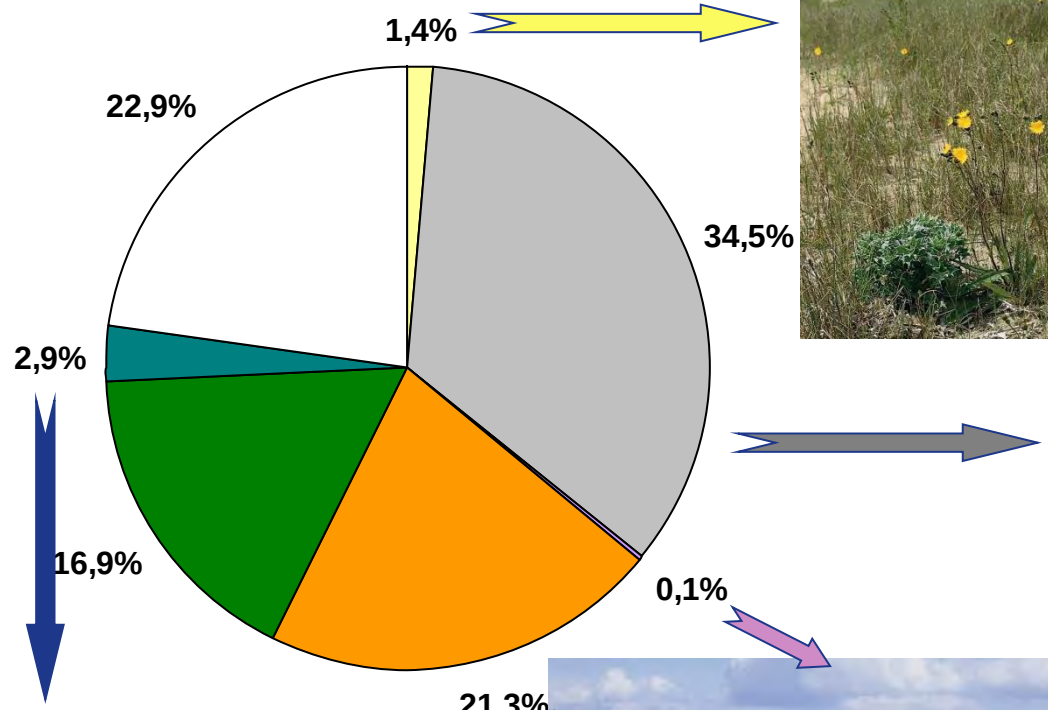
Coastal dunes in the Netherlands

Amsterdam Dunes

- 34 km2
- functions:
  - production drinking water
  - coastal defence
  - recreation
  - nature reserve
- Part of Natura 2000 site



Natura 2000-site: 40% open habitats



White dunes, type H2120
46 ha

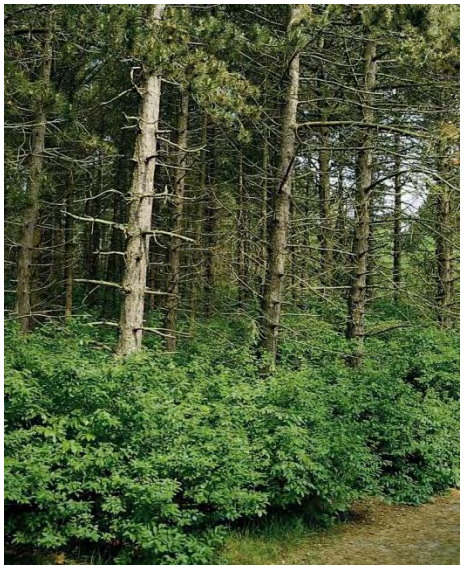
Grey dunes, type H2130
1169 ha

Dune slack, type H2190

Dune heath, type H2150 5 ha

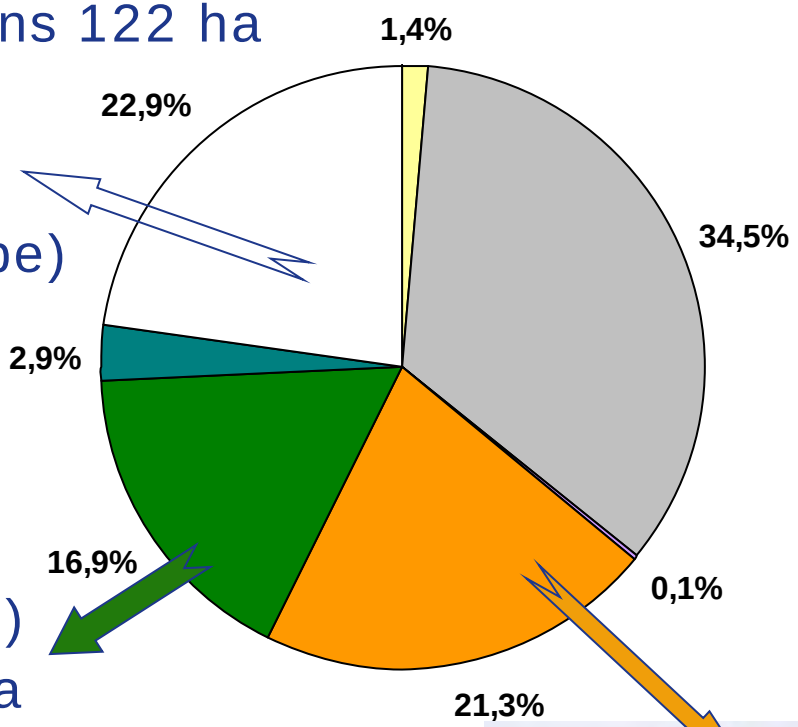
waternet

scrub and woodland habitats



Pine plantations 122 ha

Black Cherry scrub 185 ha (no habitattype)



Dune Woodland (type H2180) 571 ha

Hippophae rhamnoides scrub (type H2160) 722 ha

Prunus serotina

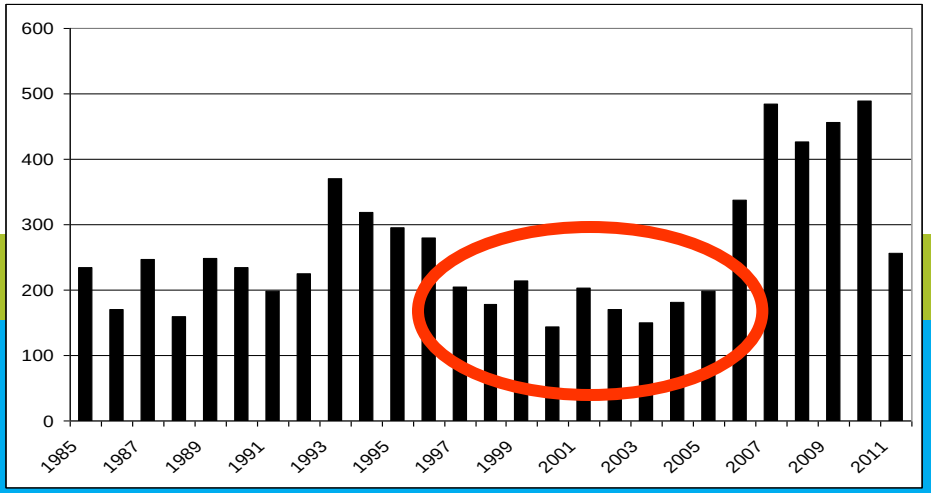
- Broadleaved tree from North America
- Rosaceae
- Dry to moist, more or less acid soil
- Early and abundant seed production
- Mamal & bird dispersion
- Easy settling, fast growing

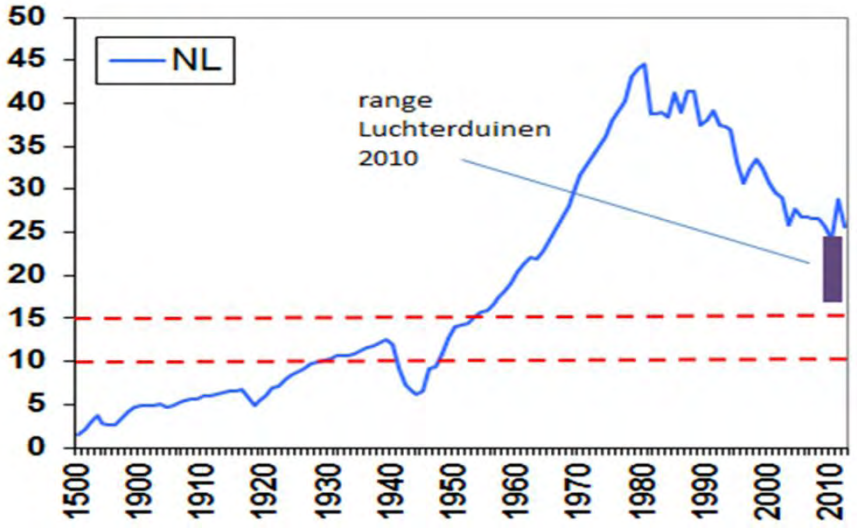
- Invasive

Short history of Prunus

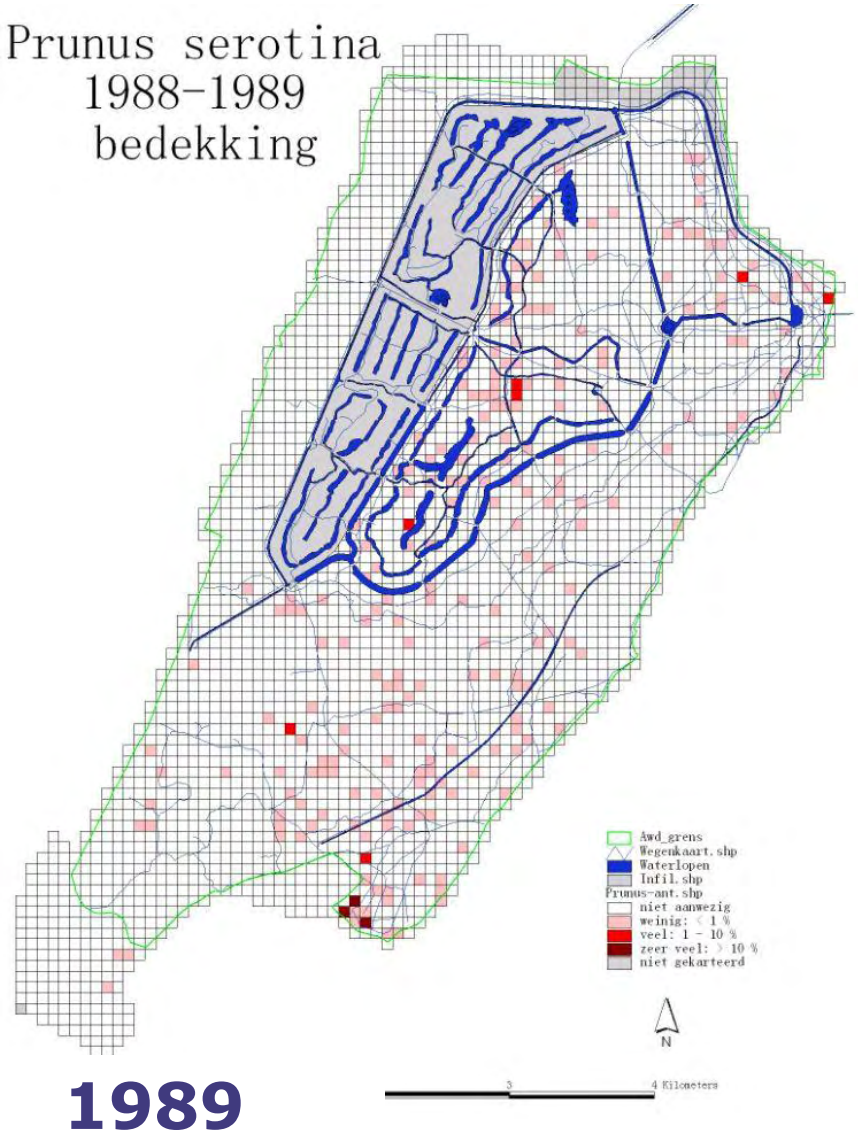
- 1930 - 1970 : Introduced by man
- 1970 - 1990 : Invasive in pine stands
  Still rare in open dunes
- >1990 – 2012: Increased all over AWD

- Holds true for almost all dune areas in The Netherlands

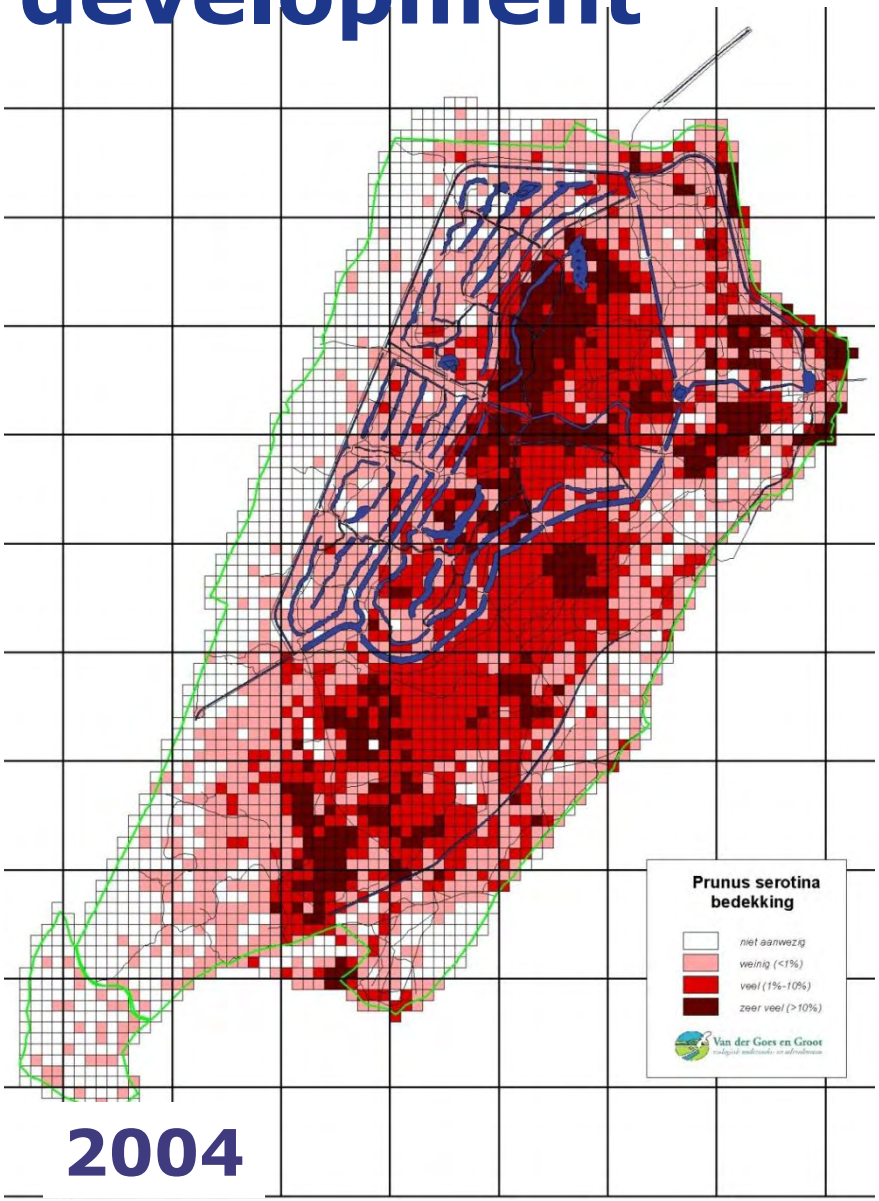




Prunus serotina development



1989



2004

Problem

- Dune habitats get rapidly overgrown by the exotic and invasive species **Prunus serotina**

- The favourable conservation status of Natura2000 dune habitats is at risk

How it starts

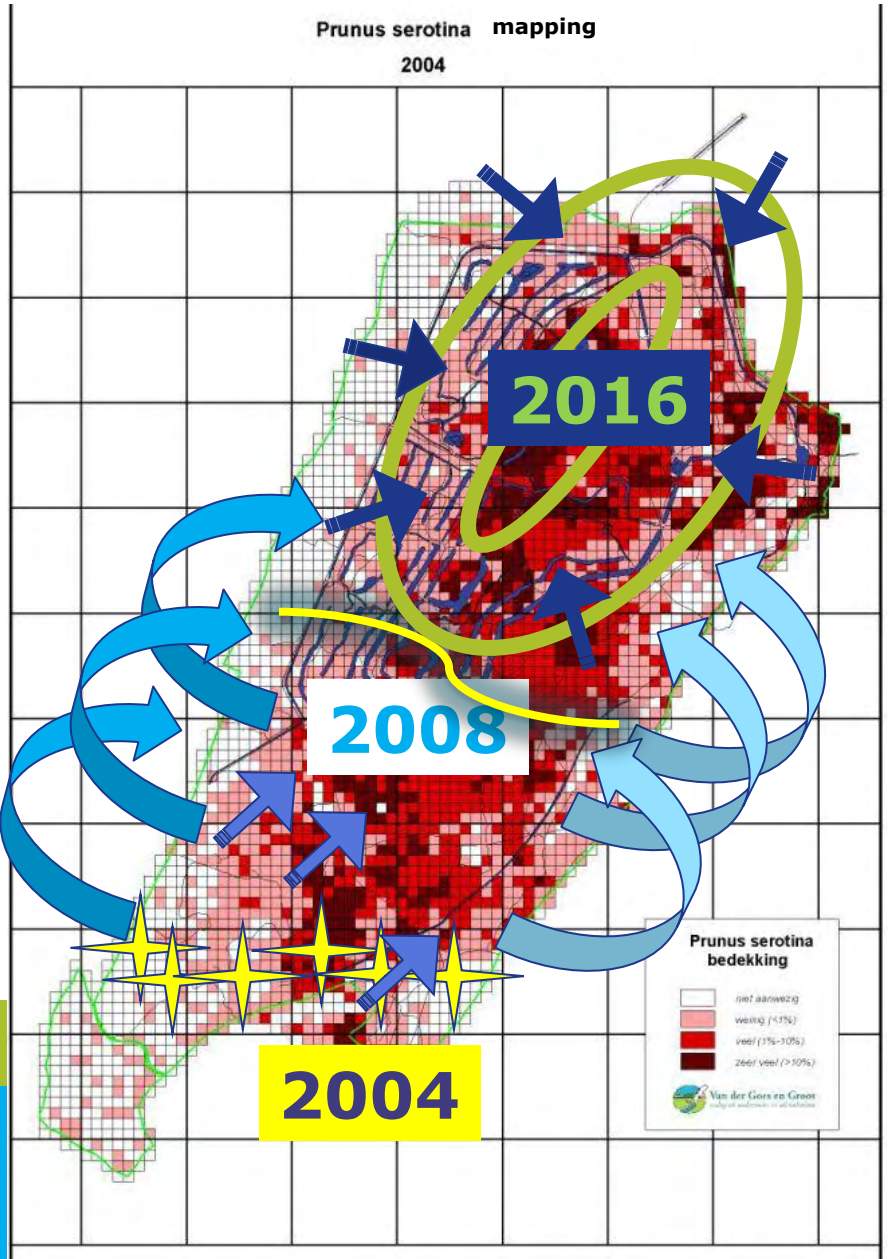
… and after some years…

… and after some more years…

waternet

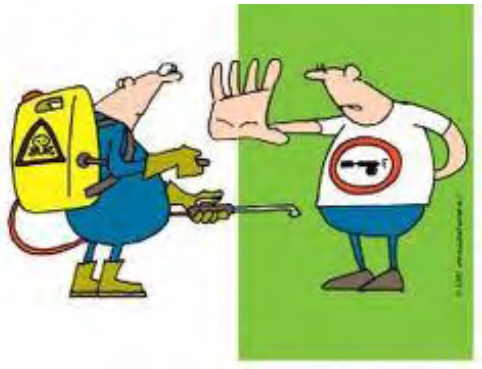
In 10-15 years habitat of low Sea Buckthorn shrub changed into high Prunus woodland

Our plan



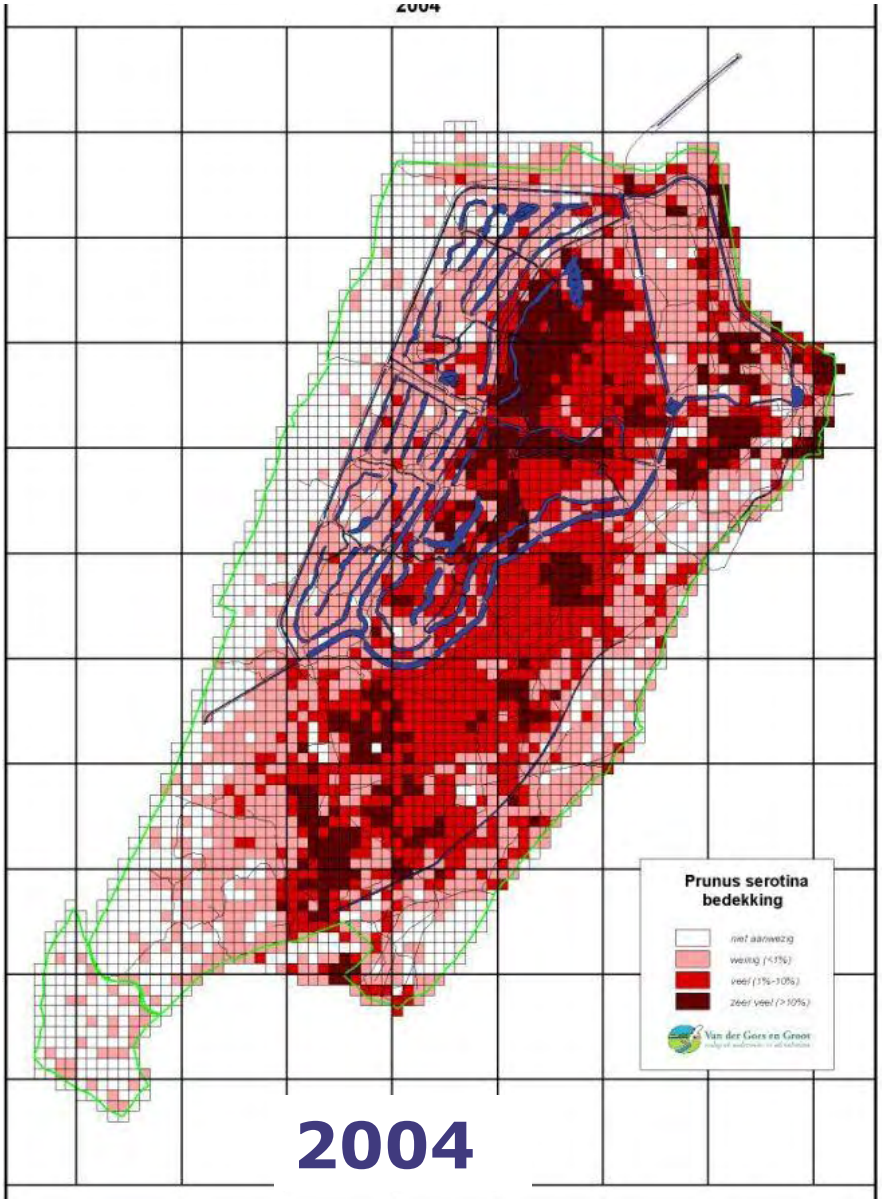
management	ha
Clearing + cutting	1000
Mowing	80
Grazing	1400

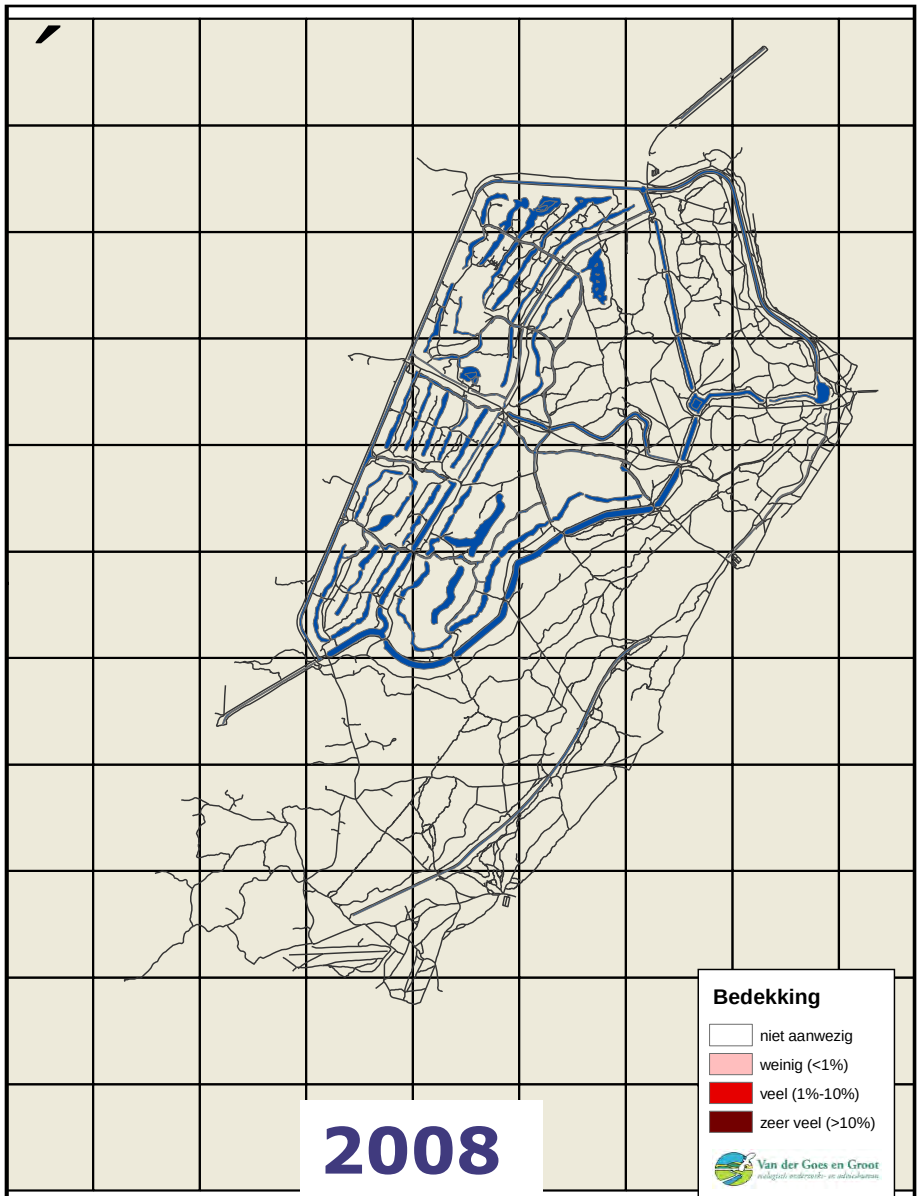
NO herbicides



In 2008 presence 75% -> 77%

slow down yearly growth 25 -> 11 %/yr





OMG!!

Haarlem en omgeving

Kaalslag door Waternet schokt natuurclubs

Protest bomenkap in duinen

De Renbaan in de Amsterdamse Waterleidingduinen oogt als 'een maanlandschap', luidt het protest. „Flora en fauna zijn totaal verdwenen." FOTO HARRY HOBO

Margot Klompmaker

natics, waaronder de Vogelwerkgroep Kennemerland Zuid, de Stichting Natuurbelang en de Stichting Herstel Inheems Duin, heeft Waternet inmiddels allerlei bomen omgeruimd. „Dat is uit ecologisch oogpunt onverstandig en getuigt niet van goed beheer", zegt Harry Hobo gekaart bij de verantwoordelijk Amsterdams wethouder Udo Kock. Hoe „Je vraagt je af of Waternet nog wel in staat is een verantwoord ecologisch beleid te voeren, te meer daar het aantal ecologen dat Waternet n dienst heeft de laatste jaren sterk is verminderd."

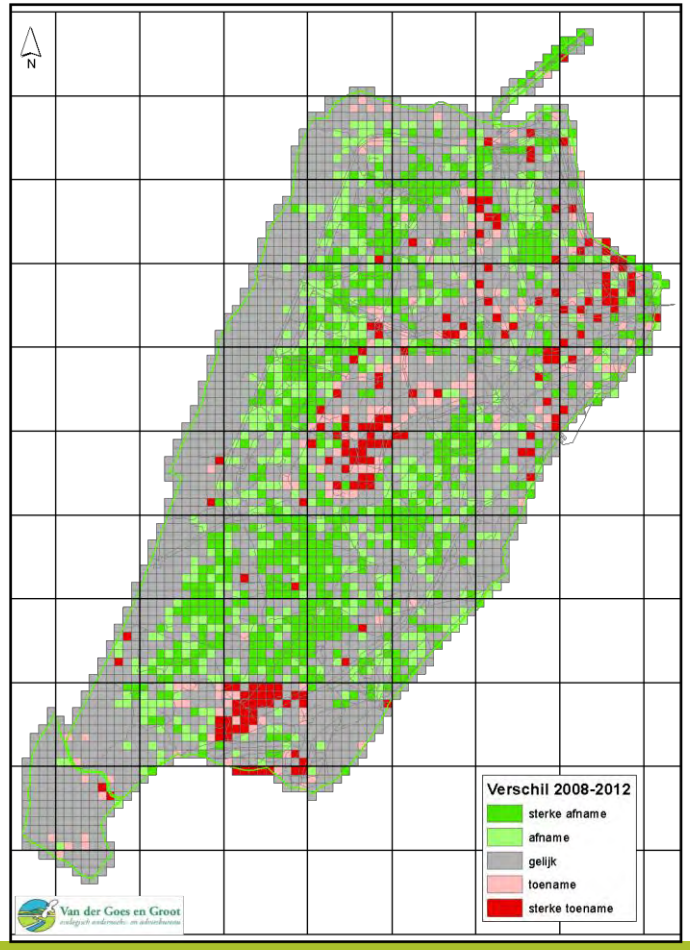
Ook Hans Vader van de Vogelwerkgroep betreurt de bomenkap. „Ik vind het tamelijk zinloos en snap ook niet waarom. Het ziet er niet uit. Hier en daar is er zo veel weggehaald dat het wel een maanlandschap lijkt. Het bestrijden van de prunus is prima, maar moet dat zo?

Willem Stuulen van Waternet herkent zich niet in de kritiek. „We hebben de taak de prunus te bestrijden en dat doen we al een aantal jaren. Maar dood hout kappen we niet zo maar om. We weten hoe belangrijk dit hout is voor de natuur." Stuulen erkent dat Waternet op sommige plekken flink aan de slag

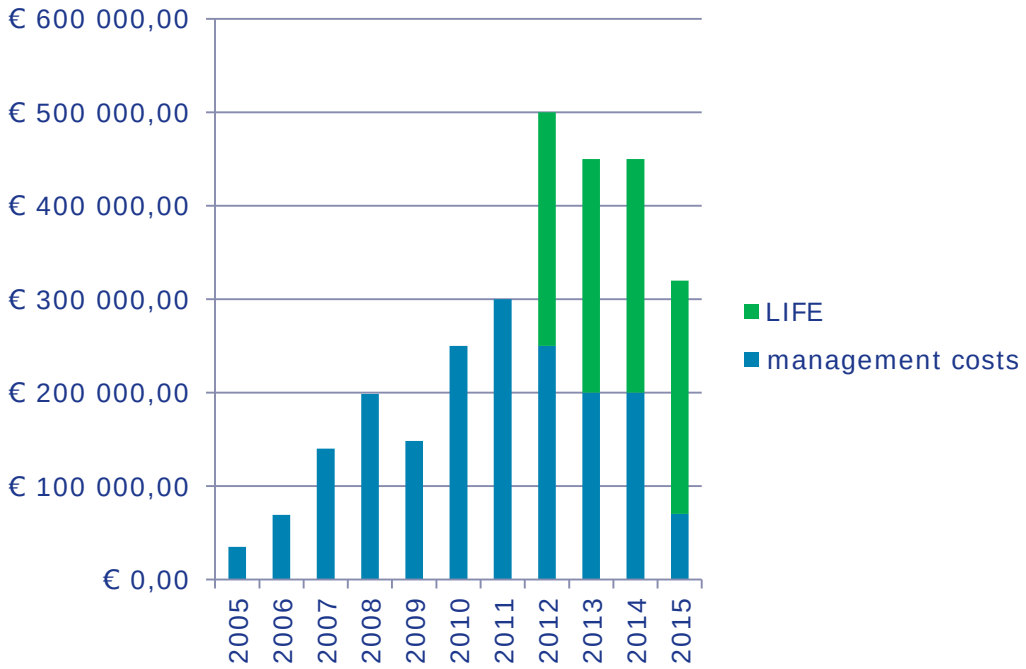
waternet

waternet

Management effect 2008 - 2012



Managment costs



- 2012-2016 LIFE+ prunus € 1.000000

Lessons and conclusion Dutch dune areas

- Detect invasive species in an early stage.
- Invest everything to eliminate the invasive species
- Grazing
- Make a strategic plan
- No compromises
- Communication
- Management is very costly
- In case of a beginning invasion:

  don't think it's too late, it even will get worse

Recommendations

- Investigate potential invasions!
- Start management A.S.A.P!

INVASIVE Dune SPECIES
Acer pseudoplatanus
Ailanthus altissima
Ambrosia artemisiifolia
Colutea arborescens
Cotoneaster spec.
Datura stramonium var. tatula
Elaeagnus multiflora
Fallopia baldschuanica
Heracleum mantegazzianum
Impatiens glandulifera
Mahonia aquifolium
Parthenocissus inserta
Pinus nigra
Populus spec.
Rosa rugosa
Symphoricarpos albus
Syringa vulgaris

Questions??
Many thanks to Luc Geelen