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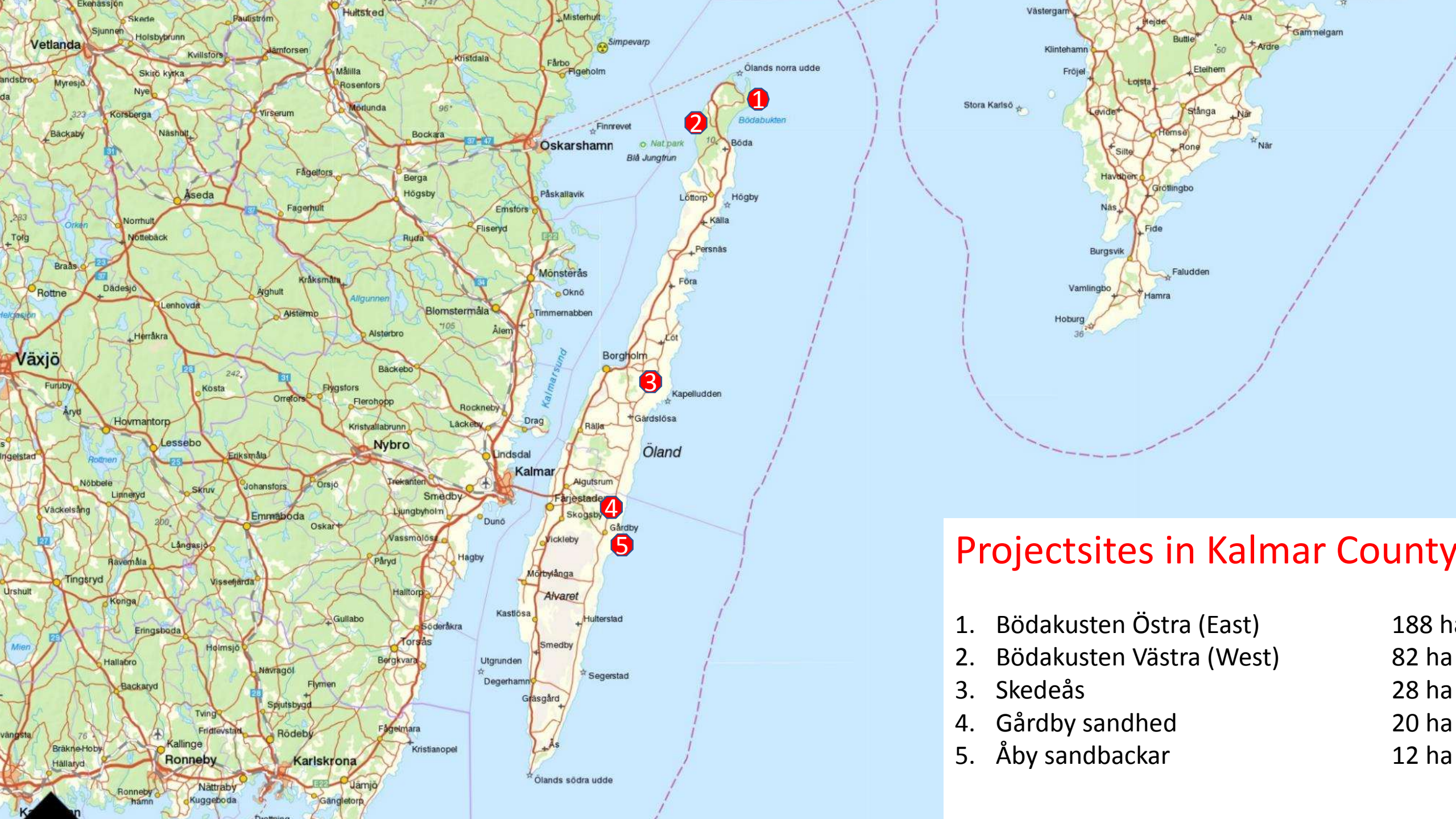
- Restaurations of sandy habitats
in the County of Kalmar





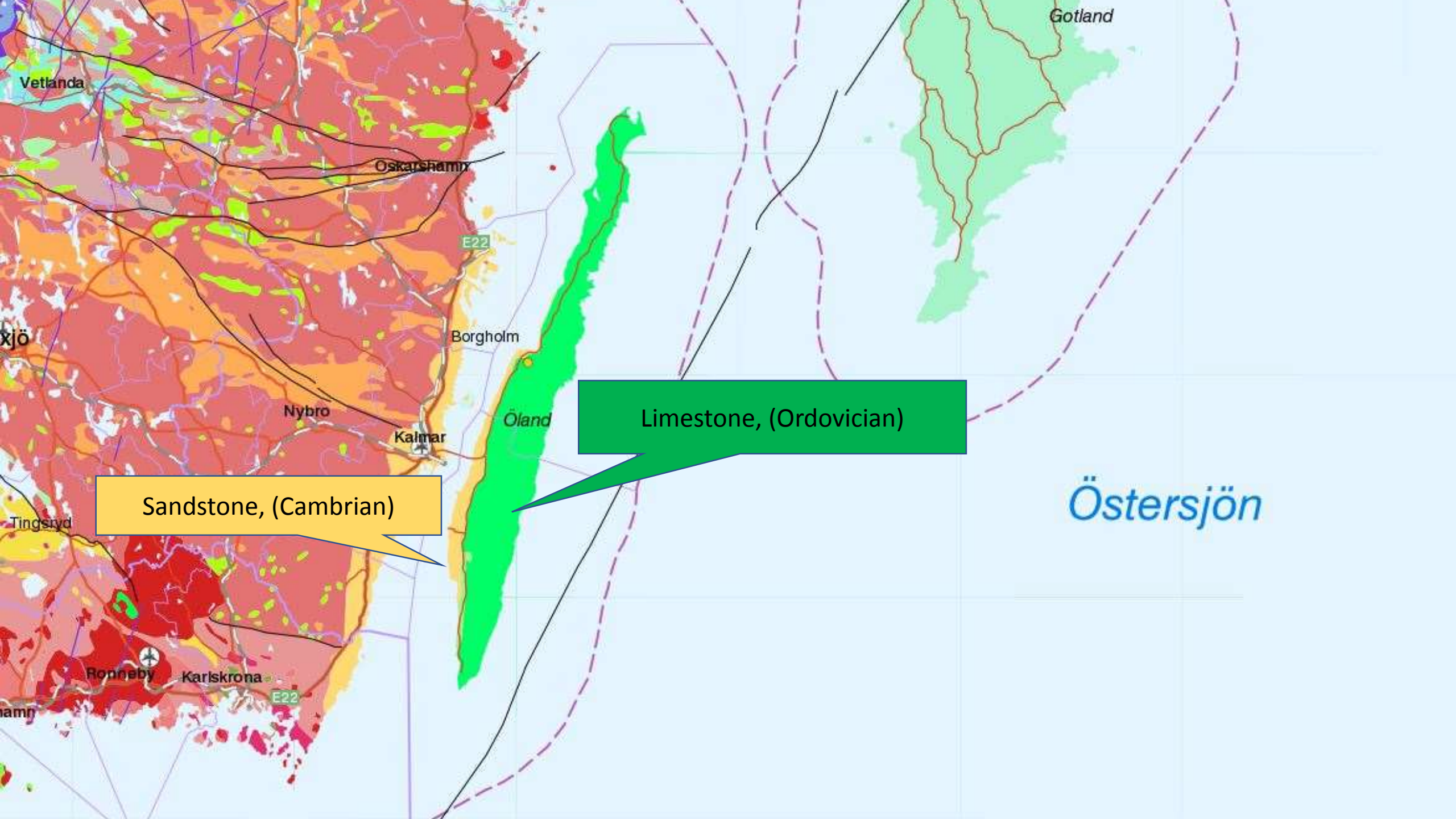
Sand Life

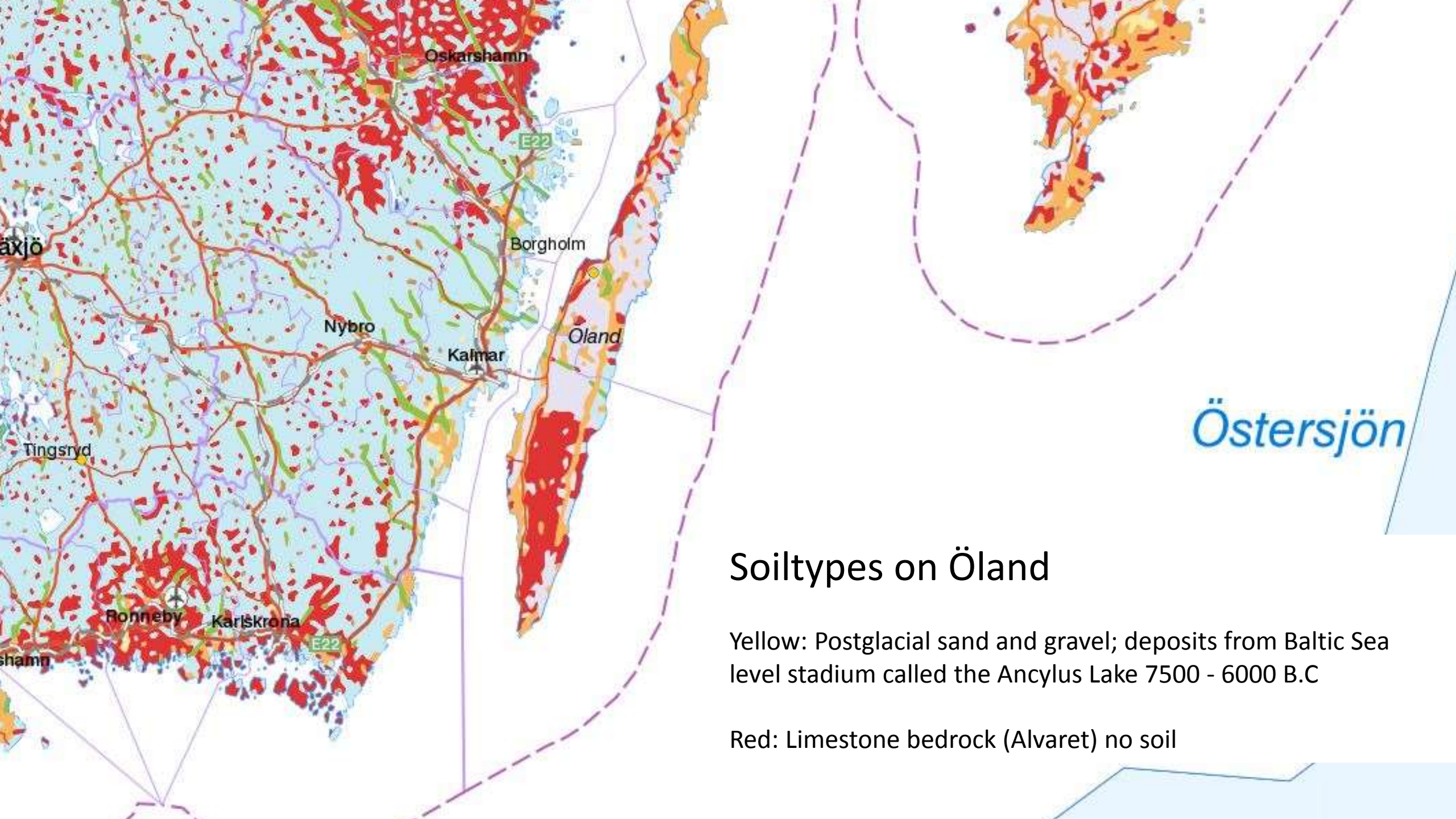
23 Projectsites



Projectsites in Kalmar County

- | | |
|-----------------------------|--------|
| 1. Bödakusten Östra (East) | 188 ha |
| 2. Bödakusten Västra (West) | 82 ha |
| 3. Skedeås | 28 ha |
| 4. Gårdby sandhed | 20 ha |
| 5. Åby sandbackar | 12 ha |





Soiltypes on Öland

Yellow: Postglacial sand and gravel; deposits from Baltic Sea level stadium called the Ancylus Lake 7500 - 6000 B.C

Red: Limestone bedrock (Alvaret) no soil



Project sites

1. Böda östra (East)
2. Böda västra (West)
3. Skedeås
4. Gårdby sandhed
5. Åby sandbackar

Natura 2000 habitat types affected by the project:

- 2120 *Shoreline shifting white dunes* BÖ, BV
- 2130 *Fixed coastal grey dunes* BÖ, BV
- **2180 *Wooded dunes* BÖ, BV**
- 2330 *Inland dunes* Å
- **6120 *Xeric sand calcareous grasslands* S, G, Å**
- 6210 *Seminatural dry grasslands (calcareous)* S, G
- 6410 *Molinia meadows on calcareous soils* S, G
- 9070 *Fennoscandian wooded pastures* S, G

Gårdby sandhed 2012



Gårdby sandhed

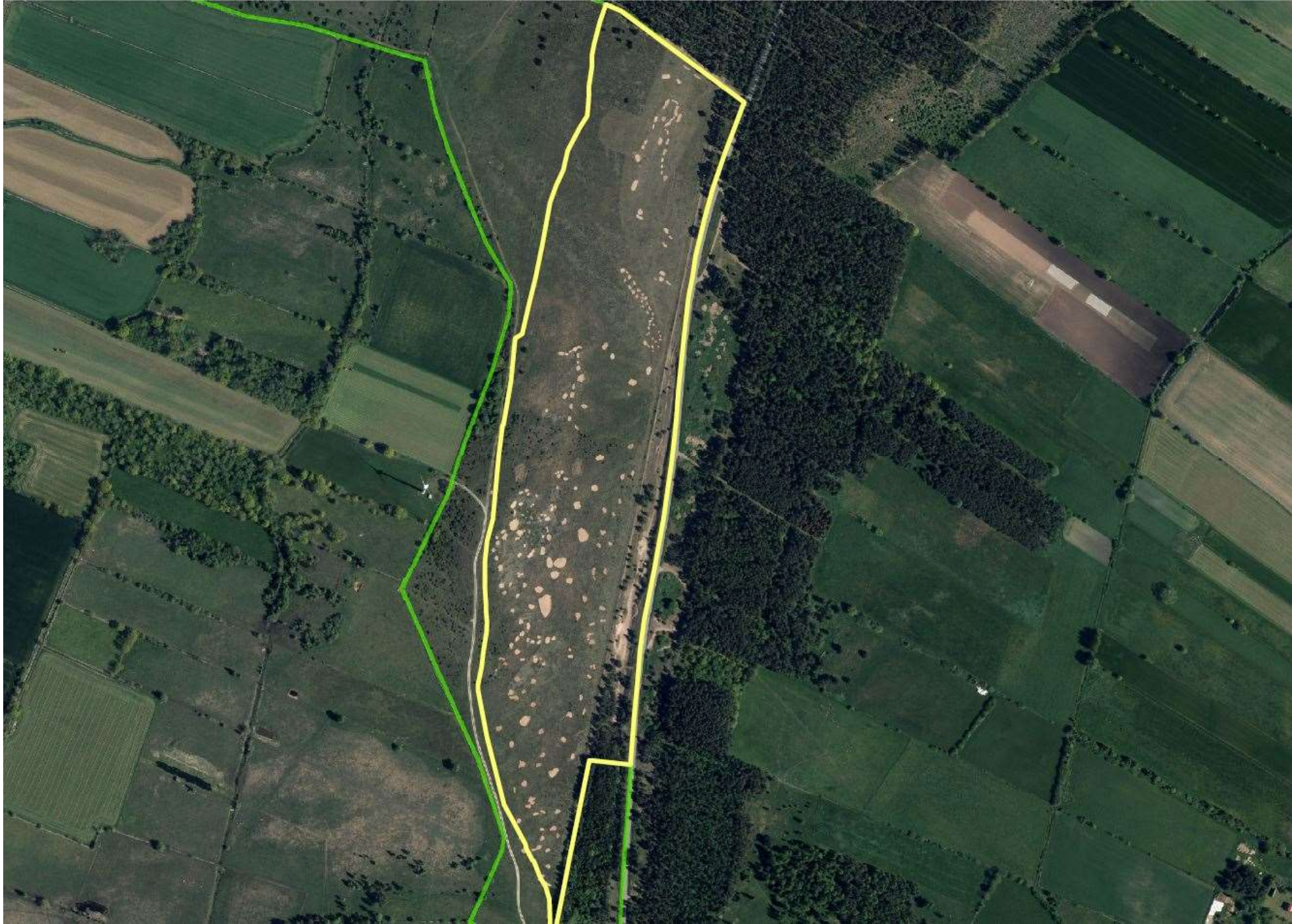
- **A.4** Analyses of soil chemistry
- **C.2b** *Creating areas of bare sand*
- **C.6** *Clearing of encroachment*
- **C.9** *Management of heather*
- **C.2a** *Shallow harrowing*



Gårdby sandhed

- 136 patches of bare sand
- 360 m²
- 10 m²

Total:
10 000 m² (1 hectare)

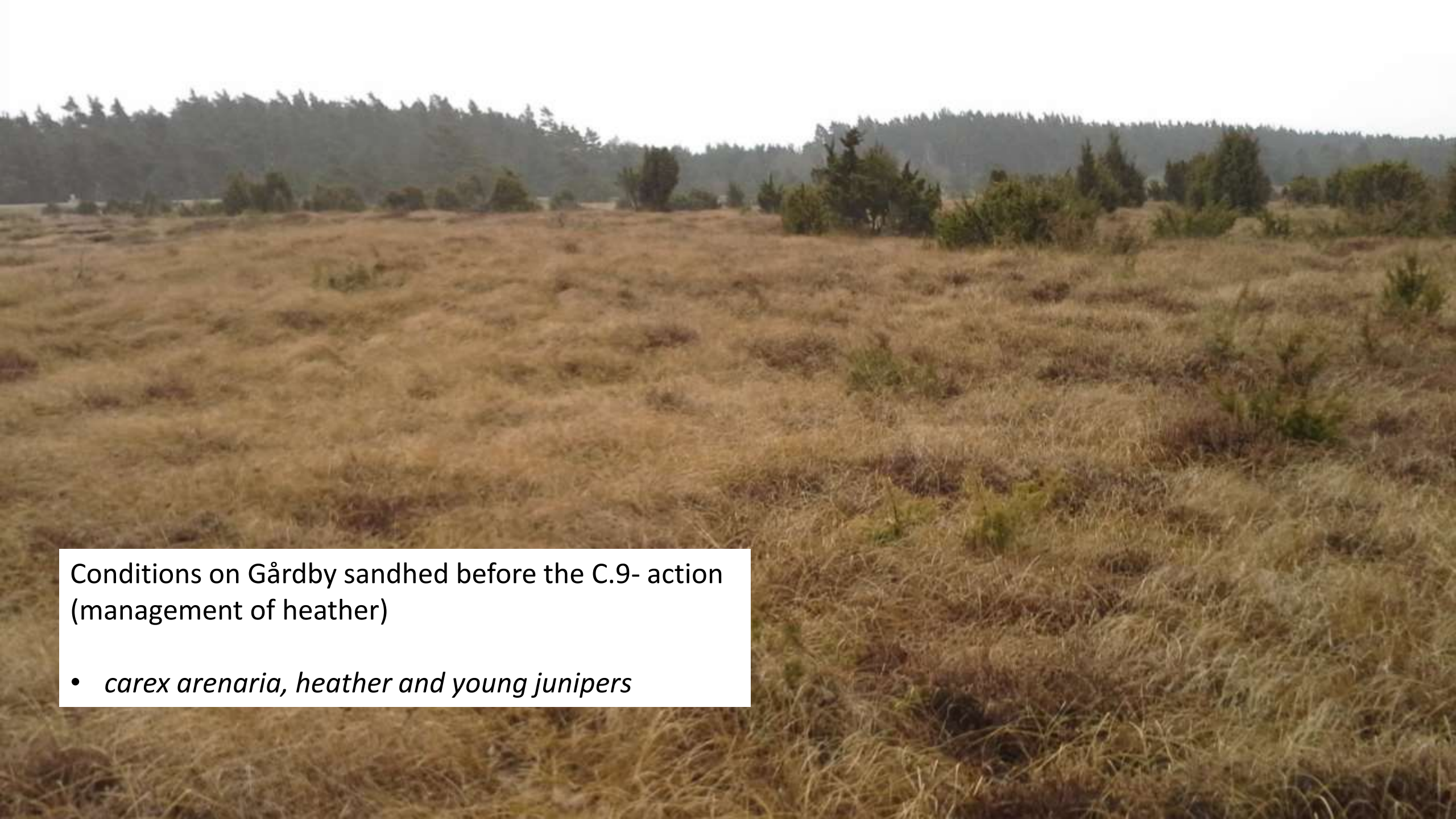




Difference
between
topsoil removal
and deep
perturbation

Gårdby sandhed





Conditions on Gårdby sandhed before the C.9- action
(management of heather)

- *carex arenaria*, heather and young junipers

Heathermanagement, part 1. (Local farmers)



Heathmanagement, part 2. (Entrepreneur)





Before and after C.9 (heather management)
and C.6 (clearing of encroachment) part 1.

Clearing of encroachment C.6, part 2.





The embankment from the
railroad on Öland

Steppe-like vegetation
including Xeric sand (6120)
In early succession

Easily disturbed surface

- Horsetrail
- Mountainbiking/walking



Calcareous sandy grassland (6120)

Koeleria glauca –community

Festuca polesica

Thymus serpyllum

Sedum album

Petrorhagia prolifera

Alyssum alyssoides

Phleum arenarium




Clearing of encroachment C.6, part 3.



Shallow harrowing C.2a





The rural Development Program
No vegetation = lack of forage= no payments



Actions Skedeås

C.4 Prescribed burning

C.5 Firebreakers

C.6 Clearing of
encroachment

C.7 Fencing

C.10 Grazing



Skedeås

C.4 Prescribed burning

C.5 Firebreakers

C.6 Clearing of encroachment

C.7 Fencing



Skedeås

C.6 Clearing of encroachment



Actions Åby sandbackar

- C.2 Creating areas of bare sand
- C.2a (Shallow) harrowing
- C.6 Clearing of encroachment
- C.9 Management of heather



Harrowing on Åby sandbackar





Challenges in the Böda region



Big C.1 -actions (Clearing of woodland and pine plantations)



Public opinion/ information meetings



Actions at Böda Västra

- C.1 Clearing of woodland and pine plantations
- C.2 Creating areas of bare sand
- C.4 Prescribed burning
- C.6 Clearing of encroachment



Böda Västra

C.6 (*Populus balsamifera*)



Böda Västra

C.2 Creating areas of bare sand



Actions at Böda Östra

- C.1 Clearing of woodland and pine plantations
- C.2 Creating areas of bare sand**
- C.3 Removal of *Rosa rugosa*
- C.4 Prescribed burning
- C.6 Clearing of encroachment



Actions at Böda Östra

- C.2 Creating areas of bare sand
- C.3 Removal of *Rosa rugosa*
- C.4 Prescribed burning
- C.6 Clearing of encroachment
- C.1 Clearing of woodland and pine plantations



Before and after C.3-action at Böda Östra





Thank you from Kalmar and this *Bembix rostrata*

