



The journey of a *Sagina nodosa* seed *Establishment of a dune slack pioneer vegetation*

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Deltares

4 December, 2017

Imagine... you are a *Sagina nodosa*

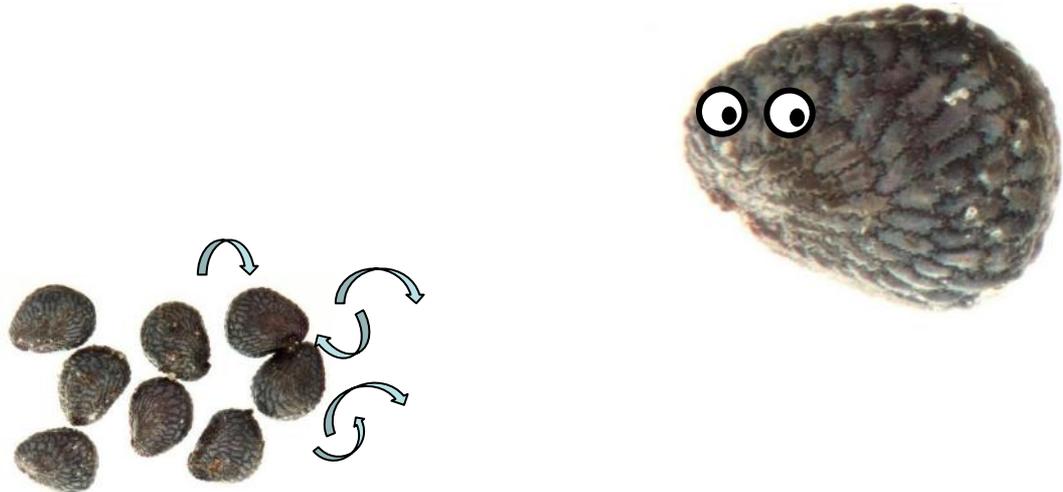


ETI • HIFN



E. Hallier, 1883

Also known as: Knotted pearlwort, or Sierlijke vetmuur/Krielparnassia in Dutch

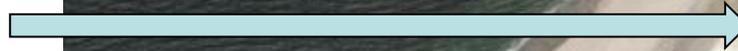


Pictures: soortenbank.nl, wilde-planten.nl

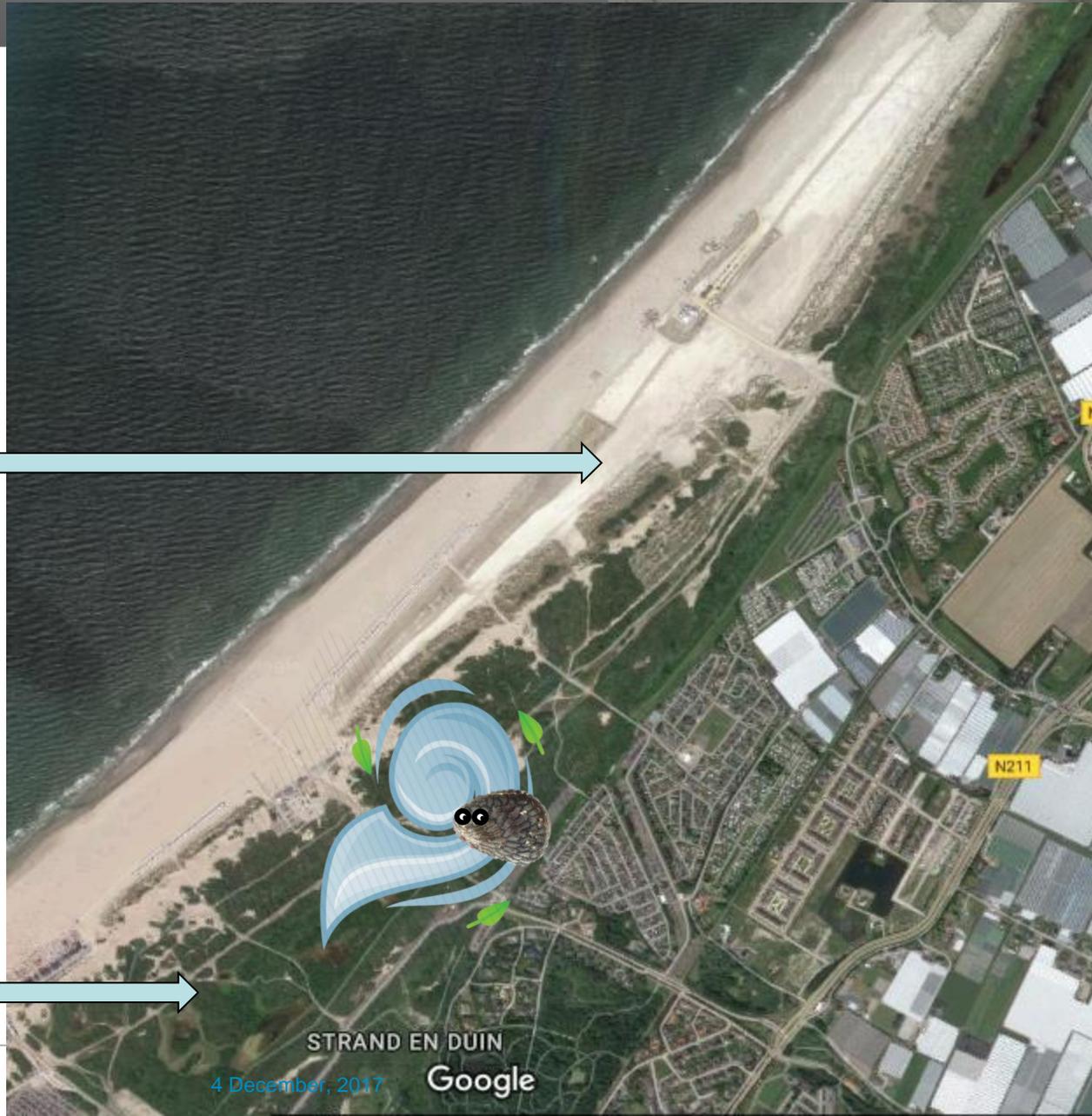
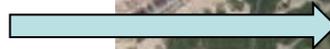
Bron: Kapittelduinen



Spanjaards Duin



Kapittelduinen



STRAND EN DUIN

4 December, 2017

Google

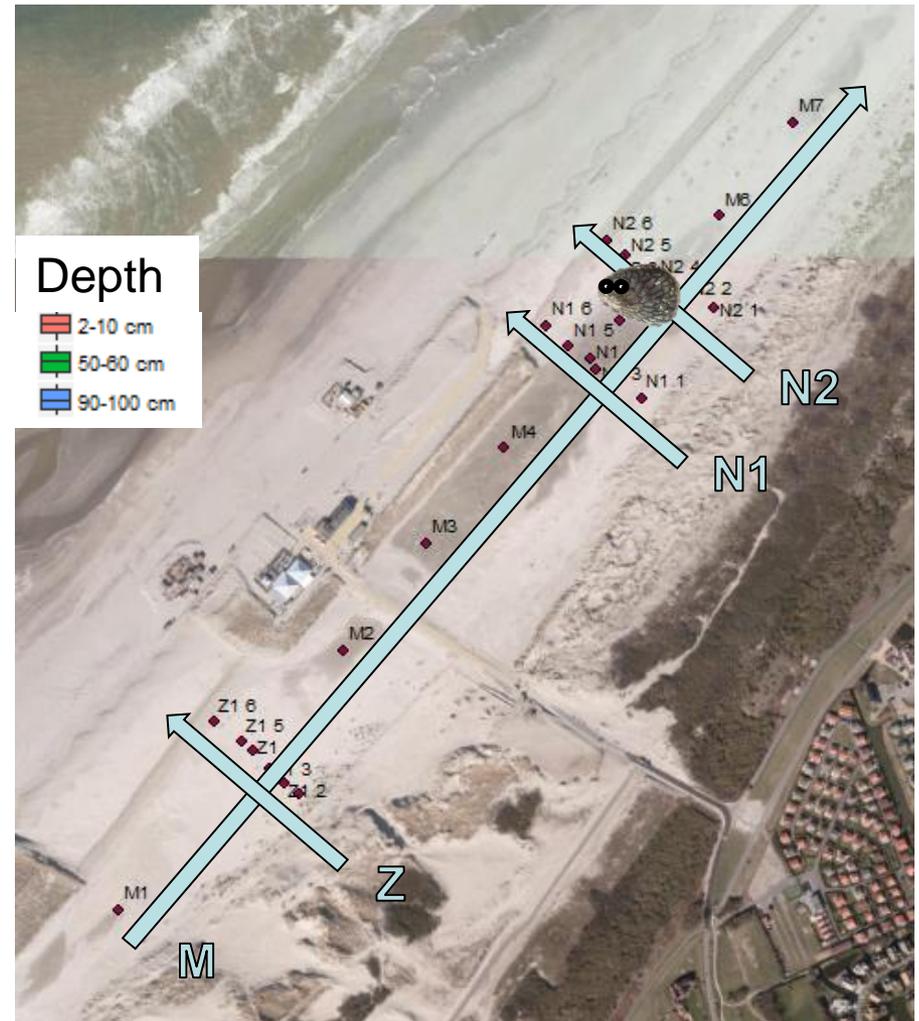
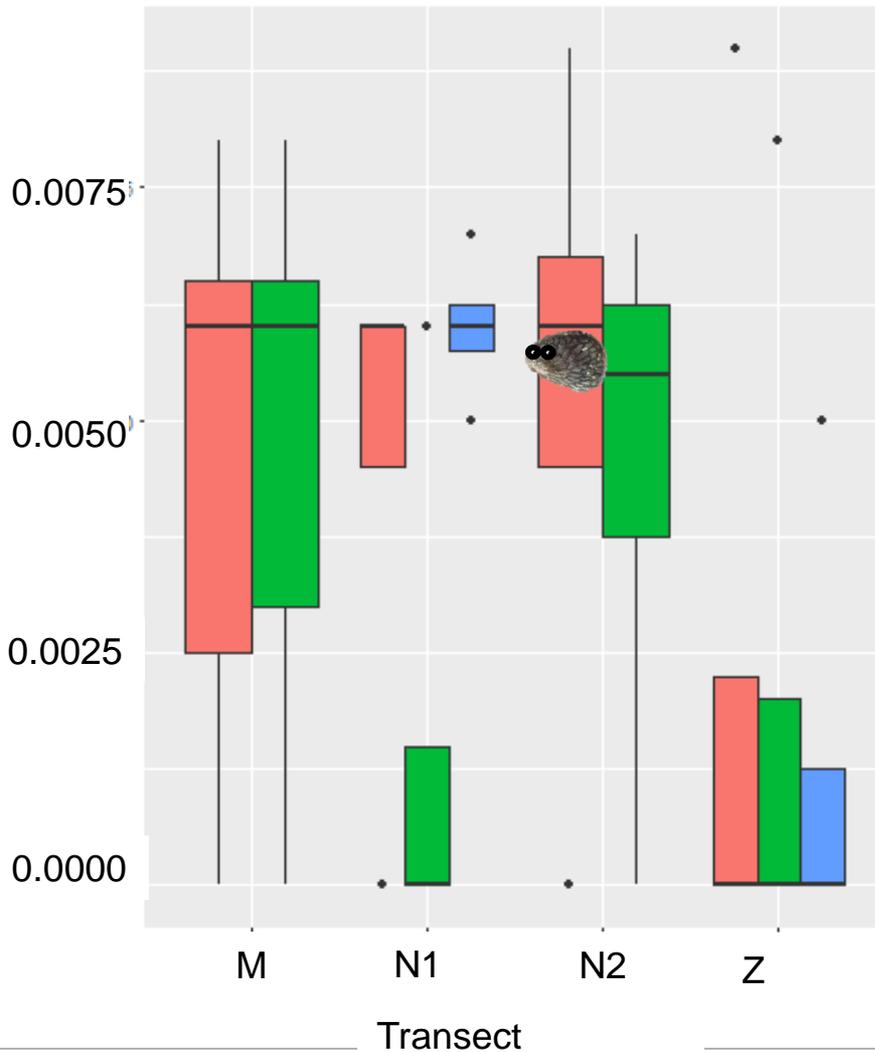
The landing



So, how are the conditions?

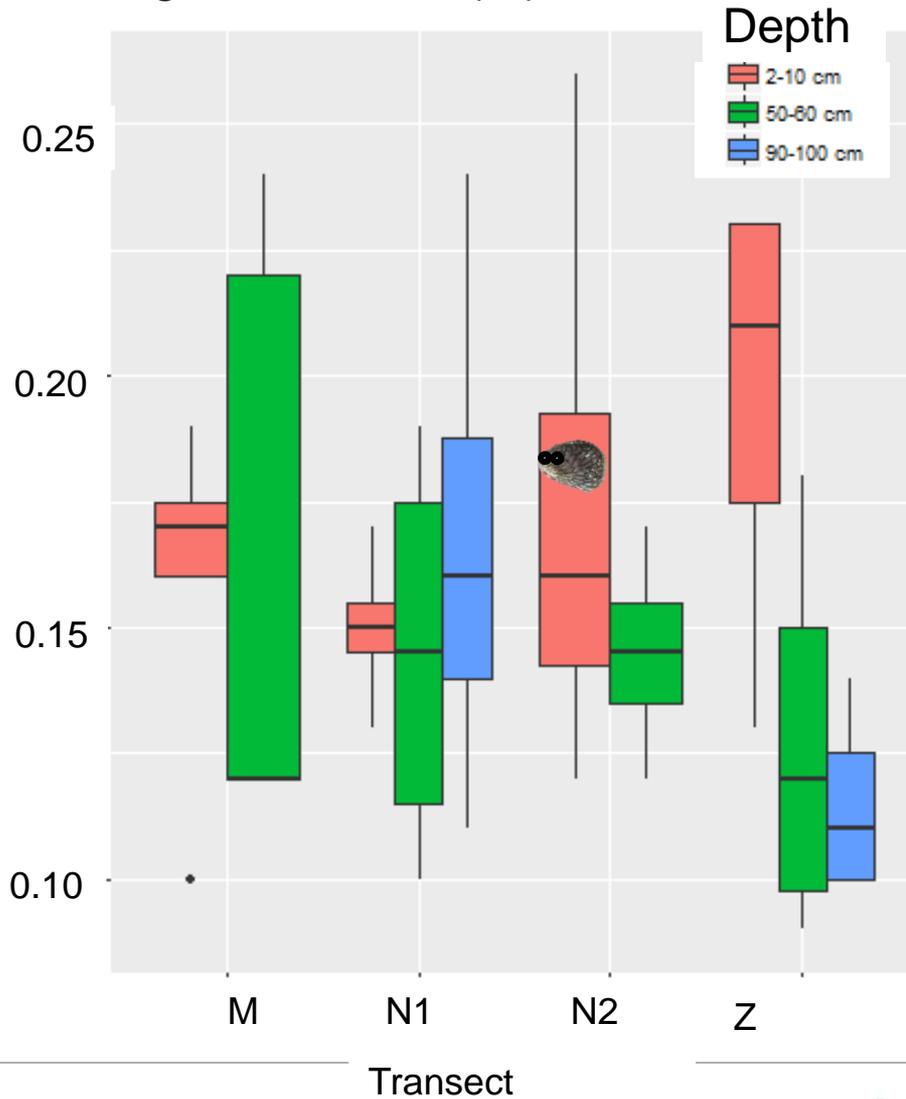


Nitrogen (%)

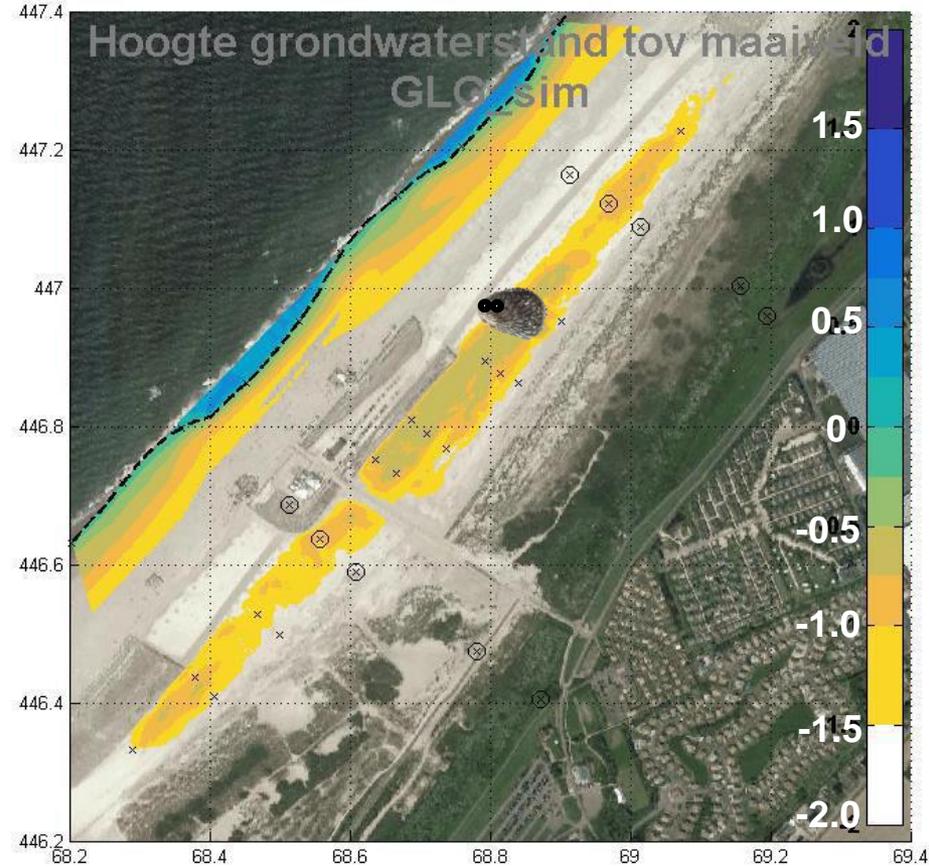




Organic Material (%)

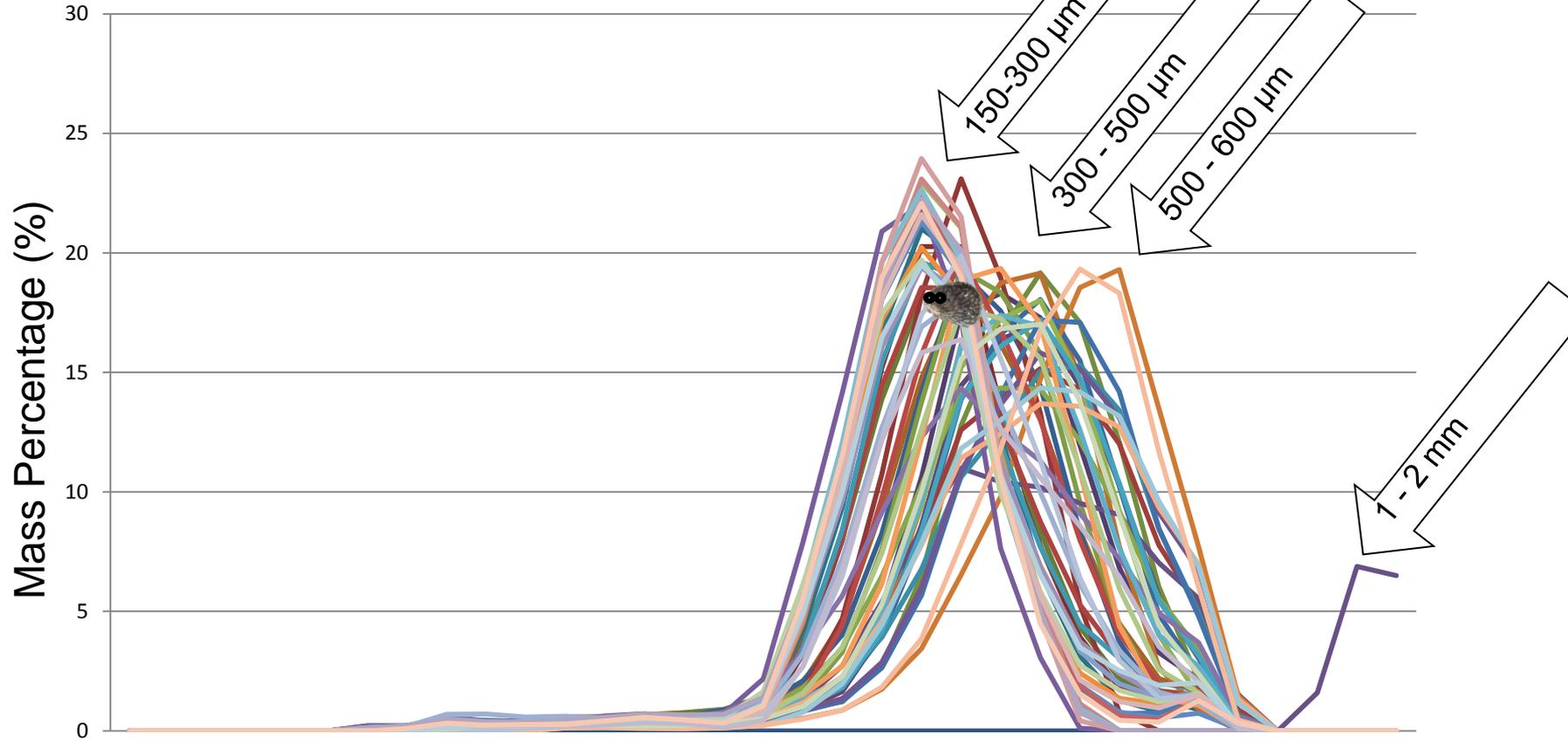


Low ground water level (m below surface)





Distribution of particle size



The neighbors - Results of seed bank analysis



Species	M1 (1L)	M2 (1L)	English	Dutch
<i>Poa annua</i>	+	.	Annual meadow grass	Straatgras
<i>Agrostis stolonifera</i>	1	.	Creeping bentgrass	Fioringras
<i>Senecio inaequidens</i>	++	+	Narrow-leaved ragwort	Bezemkruiskruid
<i>Cerastium diffusum</i>	++	+	Fourstamen chickweed	Scheve hoornbloem
<i>Sonchus asper</i>	2	.	Prickly sow-thistle	Gekroesde melkdistel
<i>Cardamine flexuosa/hirsuta</i>	1	.	Wavy/hairy bittercress	Bosveldkers/Kleine veldkers
<i>Epilobium hirsutum</i>	+	+	Great willowherb	Harig wilgenroosje
<i>Erigeron canadensis</i>	1	.	Canadian horseweed	Canadese fijnstraal
<i>Urtica dioica</i>	1	.	Common nettle	Grote brandnetel
<i>Sagina nodosa</i> 	.	+	Knotted pearlwort	Krielparnassia
<i>Juncus effusus-type</i>	.	+	Common rush type	Pitrus-type

legend

e = few

+ = dozens

++ = hundreds

+++ = thousands

r, 2017

The future?



2017



2033



Thank you!



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