

**Table S1.** List of collected plant species. Species names, average percent cover within the vegetation layer (H = Herbaceous, S = Shrub, and T = Tree), and frequencies over the 11 sampled plots.

Species	H%	S%	T%	Freq.	Species	H%	S%	T%	Freq.
<i>Ambrosia psilostachya</i> DC.	9	-	-	91%	<i>Medicago littoralis</i> Rohde ex Loisel.	< 1	-	-	18%
<i>Ammophila arenaria</i> (Mabille) Laínz	2	-	-	73%	<i>Oenothera biennis</i> L.	4	-	-	100%
<i>Amorpha fruticosa</i> L.	2	8	-	100%	<i>Osyris alba</i> L.	< 1	-	-	9%
<i>Aristolochia rotunda</i> L.	< 1	-	-	55%	<i>Petrorhagia saxifraga</i> (L.) Link	< 1	-	-	45%
<i>Artemisia vulgaris</i> L.	1	-	-	9%	<i>Phleum arenarium</i> L.	< 1	-	-	91%
<i>Arundo donax</i> L.	-	1	-	18%	<i>Picris hieracioides</i> L.	< 1	-	-	9%
<i>Asparagus acutifolius</i> L.	< 1	1	-	27%	<i>Pinus pinaster</i> Aiton	-	23	34	27%
<i>Asparagus officinalis</i> L.	< 1	-	-	18%	<i>Pinus pinea</i> L.	< 1	14	57	45%
<i>Brachypodium rupestre</i> (Host) Roem. et Schult.	< 1	-	-	27%	<i>Plantago lanceolata</i> L.	< 1	-	-	18%
<i>Calamagrostis epigejos</i> (L.) Roth	1	-	-	64%	<i>Populus nigra</i> L.	< 1	5	-	55%
<i>Calystegia soldanella</i> (L.) R. Br.	< 1	-	-	9%	<i>Prunus persica</i> (L.) Batsch	< 1	1	-	18%
<i>Carex</i> sp	8	-	-	27%	<i>Prunus spinosa</i> L.	-	1	-	9%
<i>Catapodium rigidum</i> (L.) C.E. Hubb.	< 1	-	-	81%	<i>Pyrus communis</i> L.	-	3	-	9%
<i>Cephalanthera longifolia</i> (L.) Fritsch	< 1	-	-	9%	<i>Quercus ilex</i> L.	< 1	1	-	27%
<i>Crataegus monogyna</i> Jacq.	3	-	-	18%	<i>Quercus robur</i> L.	< 1	-	-	45%
<i>Crepis foetida</i> L.	1	-	-	55%	<i>Rosa rugosa</i> Thunb.	16	3	-	100%
<i>Cynodon dactylon</i> (L.) Pers.	1	-	-	45%	<i>Rubia peregrina</i> L.	< 1	-	-	45%
<i>Cyperus capitatus</i> Vand.	1	-	-	73%	<i>Rubus canescens</i> DC.	1	1	-	64%
<i>Dactylis glomerata</i> L.	5	-	-	73%	<i>Salix</i> sp	-	2	-	18%
<i>Echinophora spinosa</i> L.	1	-	-	36%	<i>Sanguisorba minor</i> Scop.	2	-	-	73%
<i>Elymus acutus</i> (DC.) M.-A. Thiébaud	< 1	-	-	9%	<i>Scabiosa columbaria</i> L.	< 1	-	-	36%
<i>Elymus farctus</i> (Viv.) Runemark ex Melderis	6	-	-	91%	<i>Scabiosa triandra</i> L.	< 1	-	-	55%
<i>Equisetum ramosissimum</i> Desf.	1	-	-	27%	<i>Schoenus nigricans</i> L.	1	-	-	9%
<i>Erigeron canadensis</i> L.	1	-	-	91%	<i>Senecio inaequidens</i> DC.	< 1	-	-	9%
<i>Eryngium maritimum</i> L.	1	-	-	73%	<i>Silene conica</i> L.	< 1	-	-	27%
<i>Eupatorium cannabinum</i> L.	< 1	-	-	9%	<i>Silene italica</i> (L.) Pers.	< 1	-	-	45%
<i>Festuca fasciculata</i> Forssk.	1	-	-	73%	<i>Silene otites</i> (L.) Wibel	3	-	-	18%
<i>Fumana procumbens</i> (Dunal) Gren. et Godr.	10	-	-	91%	<i>Silene vulgaris</i> (Moench) Garcke	< 1	-	-	64%
<i>Helianthemum nummularium</i> (L.) Mill.	1	-	-	9%	<i>Sporobolus pumilus</i> (Roth) P.M. Peterson et Saarela	43	-	-	100%
<i>Hypochaeris radicata</i> L.	< 1	-	-	18%	<i>Tamarix gallica</i> L.	-	17	-	27%
<i>Juncus conglomeratus</i> L.	< 1	-	-	18%	<i>Taraxacum officinale</i>	< 1	-	-	36%
<i>Juniperus communis</i> L.	< 1	-	-	9%	<i>Teucrium capitatum</i> L.	1	-	-	18%
<i>Lagurus ovatus</i> L.	1	-	-	64%	<i>Teucrium flavum</i> L.	2	-	-	27%
<i>Ligustrum vulgare</i> L.	< 1	-	-	9%	<i>Thymus longicaulis</i> C. Presl	4	-	-	55%
<i>Lomelosia argentea</i> (L.) Greuter et Burdet	< 1	-	-	27%	<i>Tragopogon dubius</i> Scop.	2	-	-	9%
<i>Malus domestica</i> Borkh.	< 1	< 1	-	9%	<i>Tripidium ravennae</i> (L.) H. Scholz	-	4	-	9%

**Table S2.** Results of correlation analysis. Numbers in bold represent significant correlations ( $p < 0.05$ ).

	B.s.	H.c.	L.	N.a.s	N.h.s	N.n.s	N.R.r.r	N.s.s	N.s.	N.t.s	P.p.c	P.d.t.s	R.r.m. h.	R.r.c	S.c.	T.c.	V.b.w
<b>Bare soil</b>	1.00	0.37	0.23	<b>-0.37</b>	<b>-0.02</b>	0.29	<b>0.33</b>	0.47	0.07	0.59	<b>0.10</b>	<b>0.00</b>	0.00	<b>0.68</b>	<b>0.72</b>	0.49	<b>-0.11</b>
<b>Herbaceous cover</b>	0.37	1.00	0.48	0.23	0.11	0.05	<b>0.63</b>	0.11	0.04	0.32	0.41	0.06	-0.24	<b>0.69</b>	-0.18	0.38	0.18
<b>Litter</b>	0.23	0.48	1.00	<b>0.46</b>	<b>0.59</b>	0.47	0.05	0.47	0.49	0.45	<b>0.60</b>	0.30	0.21	0.52	0.03	<b>0.67</b>	<b>0.59</b>
<b>N. alien species</b>	-0.37	0.23	<b>0.46</b>	1.00	<b>0.57</b>	0.08	<b>-0.21</b>	-0.03	0.33	0.27	<b>0.79</b>	<b>0.53</b>	<b>0.41</b>	<b>0.00</b>	-0.40	<b>0.46</b>	<b>0.89</b>
<b>N. herbaceous species</b>	-0.02	0.11	<b>0.59</b>	<b>0.57</b>	1.00	<b>0.83</b>	<b>-0.34</b>	0.51	<b>0.91</b>	0.45	0.53	<b>0.83</b>	0.26	<b>0.11</b>	-0.01	<b>0.67</b>	<b>0.59</b>
<b>N. native species</b>	0.29	0.05	0.47	0.08	0.83	1.00	<b>-0.27</b>	<b>0.75</b>	<b>0.95</b>	0.46	0.11	<b>0.71</b>	-0.05	0.25	0.29	0.48	0.18
<b>N. R. rugosa ramets</b>	<b>0.33</b>	<b>0.63</b>	0.05	<b>-0.21</b>	<b>-0.34</b>	<b>-0.27</b>	1.00	-0.19	-0.35	-0.06	0.04	<b>-0.35</b>	<b>-0.30</b>	<b>0.67</b>	0.17	0.03	<b>-0.28</b>
<b>N. shrubby species</b>	0.47	0.11	0.47	-0.03	0.51	<b>0.75</b>	-0.19	1.00	<b>0.68</b>	0.36	<b>-0.05</b>	0.44	-0.09	0.50	<b>0.51</b>	0.29	0.13
<b>N. species</b>	0.07	0.04	0.49	0.33	<b>0.91</b>	<b>0.95</b>	<b>-0.35</b>	<b>0.68</b>	1.00	0.39	0.21	<b>0.78</b>	0.01	0.17	0.14	0.46	0.37
<b>N. tree species</b>	0.59	0.32	0.45	0.27	0.45	0.46	-0.06	0.36	0.39	1.00	0.53	<b>0.65</b>	<b>0.52</b>	0.39	0.26	<b>0.78</b>	<b>0.58</b>
<b>Pinus pinea cover</b>	<b>0.10</b>	0.41	<b>0.60</b>	<b>0.79</b>	0.53	0.11	0.04	<b>-0.05</b>	0.21	0.53	1.00	0.41	<b>0.52</b>	0.24	-0.12	<b>0.83</b>	<b>0.79</b>
<b>Plot distance to the sea</b>	<b>0.00</b>	0.06	0.30	<b>0.53</b>	<b>0.83</b>	<b>0.71</b>	<b>-0.35</b>	0.44	<b>0.78</b>	<b>0.65</b>	0.41	1.00	0.34	<b>0.05</b>	-0.05	<b>0.54</b>	<b>0.60</b>
<b>R. rugosa mean height</b>	0.00	-0.24	0.21	<b>0.41</b>	0.26	-0.05	<b>-0.30</b>	-0.09	0.01	<b>0.52</b>	<b>0.52</b>	0.34	1.00	<b>-0.08</b>	0.12	<b>0.54</b>	<b>0.70</b>
<b>R. rugosa cover</b>	<b>0.68</b>	<b>0.69</b>	0.52	<b>0.00</b>	<b>0.11</b>	0.25	<b>0.67</b>	0.50	0.17	0.39	0.24	<b>0.05</b>	<b>-0.08</b>	1.00	<b>0.53</b>	0.43	<b>0.13</b>
<b>Shrub cover</b>	<b>0.72</b>	-0.18	0.03	<b>-0.40</b>	-0.01	0.29	0.17	<b>0.51</b>	0.14	0.26	<b>-0.12</b>	-0.05	0.12	<b>0.53</b>	1.00	0.25	<b>-0.15</b>
<b>Tree cover</b>	0.49	0.38	<b>0.67</b>	<b>0.46</b>	<b>0.67</b>	0.48	0.03	0.29	0.46	<b>0.78</b>	<b>0.83</b>	<b>0.54</b>	<b>0.54</b>	0.43	0.25	1.00	<b>0.65</b>
<b>Vegetated belt width</b>	-0.11	0.18	<b>0.59</b>	<b>0.89</b>	<b>0.59</b>	0.18	<b>-0.28</b>	0.13	0.37	<b>0.58</b>	<b>0.79</b>	<b>0.60</b>	<b>0.70</b>	<b>0.13</b>	-0.15	<b>0.65</b>	1.00