

Electronic Appendix 1. – Temporal change of successional dominants (percentage cover values \pm SE) during the study period. Species with a cumulated average cover over 2.5% at least at one site are listed. H – high sites, L – low sites.

| Site/year | H1 | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|------|------------|------|------------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|------------|------|-----------|------|-----------|------|-----------|
| Species | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| <i>Amaranthus albus</i> | 61.6 | ± 10.7 | 0.0 | ± 0.0 | 0.3 | ± 0.1 | 0.0 | ± 0.0 | 1.0 | ± 1.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 |
| <i>Ambrosia artemisiifolia</i> | 1.6 | ± 1.1 | 1.1 | ± 0.7 | 4.1 | ± 2.7 | 5.8 | ± 2.6 | 23.6 | ± 5.5 | 10.6 | ± 2.2 | 2.4 | ± 0.5 | 11.8 | ± 2.5 | 3.2 | ± 0.5 | 0.1 | ± 0.0 | 7.8 | ± 1.0 | 0.1 | ± 0.0 |
| <i>Anthemis ruthenica</i> | 0.3 | ± 0.2 | 47.2 | ± 13.2 | 18.4 | ± 8.2 | 8.0 | ± 4.2 | 0.1 | ± 0.1 | 3.0 | ± 0.3 | 13.0 | ± 5.6 | 2.5 | ± 0.7 | 1.0 | ± 0.3 | 0.8 | ± 0.6 | 2.8 | ± 1.0 | 1.5 | ± 0.6 |
| <i>Apera spica-venti</i> | 0.0 | ± 0.0 | 0.3 | ± 0.2 | 15.4 | ± 6.5 | 56.0 | ± 5.8 | 1.2 | ± 0.3 | 0.3 | ± 0.1 | 0.3 | ± 0.1 | 0.8 | ± 0.3 | 0.7 | ± 0.6 | 0.1 | ± 0.1 | 0.1 | ± 0.1 | 0.0 | ± 0.0 |
| <i>Bromus tectorum</i> | 0.0 | ± 0.0 | 0.5 | ± 0.3 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.2 | ± 0.1 | 0.0 | ± 0.0 | 7.2 | ± 2.4 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 |
| <i>Carex stenophylla</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.3 | ± 0.3 |
| <i>Chondrilla juncea</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 |
| <i>Conyza canadensis</i> | 3.1 | ± 1.1 | 32.2 | ± 16.8 | 19.0 | ± 4.4 | 0.2 | ± 0.1 | 0.5 | ± 0.3 | 0.2 | ± 0.0 | 0.5 | ± 0.1 | 0.8 | ± 0.3 | 0.5 | ± 0.3 | 0.6 | ± 0.4 | 0.1 | ± 0.1 | 0.8 | ± 0.3 |
| <i>Cynodon dactylon</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.1 | ± 0.1 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.1 | ± 0.1 | 0.9 | ± 0.8 | 1.5 | ± 1.4 |
| <i>Equisetum ramosissimum</i> | 0.7 | ± 0.1 | 0.6 | ± 0.1 | 1.6 | ± 0.2 | 1.0 | ± 0.2 | 1.5 | ± 0.4 | 1.6 | ± 0.5 | 0.3 | ± 0.1 | 2.4 | ± 1.9 | 0.4 | ± 0.1 | 4.1 | ± 1.3 | 1.5 | ± 0.4 | 1.8 | ± 0.6 |
| <i>Eryngium campestre</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.1 | ± 0.1 | 0.6 | ± 0.3 | 1.9 | ± 0.9 | 1.6 | ± 0.7 | 2.7 | ± 1.2 | 3.4 | ± 1.0 | 3.9 | ± 1.0 | 7.0 | ± 3.0 |
| <i>Erysimum diffusum</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 1.6 | ± 0.5 | 2.7 | ± 1.3 | 3.5 | ± 2.1 | 5.4 | ± 1.7 | 4.1 | ± 0.9 | 0.2 | ± 0.1 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 1.9 | ± 0.9 | 0.9 | ± 0.5 |
| <i>Lepidium densiflorum</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.4 | ± 0.4 | 0.0 | ± 0.0 | 0.1 | ± 0.1 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.0 | ± 0.0 |
| <i>Poa angustifolia</i> | 0.0 | ± 0.0 | 0.2 | ± 0.1 | 0.2 | ± 0.1 | 2.2 | ± 0.9 | 6.4 | ± 2.1 | 5.2 | ± 1.6 | 9.8 | ± 2.7 | 35.0 | ± 8.8 | 38.0 | ± 9.0 | 9.0 | ± 1.1 | 16.6 | ± 2.2 | 33.4 | ± 4.7 |
| <i>Poa pratensis</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.1 | ± 0.1 | 1.1 | ± 0.6 | 0.3 | ± 0.3 | 0.5 | ± 0.4 | 0.7 | ± 0.6 | 1.2 | ± 1.0 | 0.8 | ± 0.3 | 0.3 | ± 0.2 | 0.7 | ± 0.6 | 0.0 | ± 0.0 |
| <i>Potentilla argentea</i> | 0.0 | ± 0.0 | 0.0 | ± 0.0 | 0.2 | ± 0.1 | 0.5 | ± 0.4 | 0.4 | ± 0.2 | 0.6 | ± 0.3 | 1.1 | ± 0.3 | 3.0 | ± 1.4 | 3.9 | ± 1.4 | 9.3 | ± 3.9 | 9.6 | ± 2.5 | 11.3 | ± 4.6 |
| <i>Rumex acetosella</i> | 2.6 | ± 1.1 | 7.6 | ± 4.2 | 0.9 | ± 0.5 | 1.4 | ± 0.5 | 0.8 | ± 0.6 | 0.2 | ± 0.1 | 6.0 | ± 2.9 | 19.2 | ± 8.5 | 11.0 | ± 4.4 | 0.2 | ± 0.1 | 2.2 | ± 1.2 | 4.7 | ± 1.2 |
| <i>Trifolium arvense</i> | 0.0 | ± 0.0 | 0.2 | ± 0.1 | 0.2 | ± 0.1 | 7.3 | ± 3.1 | 4.1 | ± 1.9 | 0.3 | ± 0.1 | 20.6 | ± 6.1 | 0.1 | ± 0.1 | 43.0 | ± 14.7 | 0.0 | ± 0.0 | 19.8 | ± 1.6 | 0.1 | ± 0.0 |

| Site/year | L2 | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Species | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| <i>Amaranthus albus</i> | 0.5 | ±0.2 | 0.1 | ±0.0 | 0.1 | ±0.0 | 0.0 | ±0.0 | 0.1 | ±0.1 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Ambrosia artemisiifolia</i> | 0.2 | ±0.2 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Anthemis ruthenica</i> | 0.0 | ±0.0 | 0.4 | ±0.4 | 0.5 | ±0.4 | 0.3 | ±0.2 | 2.1 | ±0.9 | 1.0 | ±0.4 | 4.0 | ±1.2 | 0.0 | ±0.0 | 0.1 | ±0.1 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Apera spica-venti</i> | 0.0 | ±0.0 | 0.2 | ±0.1 | 0.1 | ±0.1 | 6.6 | ±2.7 | 15.4 | ±2.1 | 3.4 | ±0.8 | 2.5 | ±0.6 | 5.8 | ±1.2 | 2.9 | ±0.7 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Bromus tectorum</i> | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.6 | ±0.2 | 2.9 | ±1.0 | 0.0 | ±0.0 | 0.1 | ±0.1 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Carex stenophylla</i> | 2.2 | ±1.0 | 0.7 | ±0.3 | 0.1 | ±0.1 | 1.9 | ±0.9 | 1.3 | ±0.6 | 0.6 | ±0.3 | 2.9 | ±0.8 | 6.6 | ±3.4 | 4.2 | ±3.2 | 0.2 | ±0.2 | 0.4 | ±0.3 | 0.2 | ±0.2 |
| <i>Chondrilla juncea</i> | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.4 | ±0.4 | 0.0 | ±0.0 | 0.6 | ±0.4 | 0.7 | ±0.4 | 3.6 | ±1.2 | 0.8 | ±0.4 | 3.7 | ±1.1 | 0.5 | ±0.3 | 0.2 | ±0.1 |
| <i>Conyza canadensis</i> | 6.0 | ±1.3 | 0.4 | ±0.3 | 0.8 | ±0.2 | 0.1 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.1 | ±0.1 |
| <i>Cynodon dactylon</i> | 6.6 | ±2.6 | 4.3 | ±1.7 | 9.2 | ±4.3 | 21.4 | ±4.1 | 37.2 | ±2.5 | 38.0 | ±4.1 | 39.0 | ±6.9 | 54.0 | ±8.6 | 61.0 | ±10.3 | 54.0 | ±7.5 | 45.0 | ±3.3 | 48.4 | ±3.2 |
| <i>Equisetum ramosissimum</i> | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Eryngium campestre</i> | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Erysimum diffusum</i> | 1.0 | ±0.8 | 37.8 | ±4.9 | 19.6 | ±3.1 | 26.0 | ±4.2 | 2.1 | ±0.6 | 9.6 | ±1.9 | 0.1 | ±0.1 | 0.6 | ±0.4 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Lepidium densiflorum</i> | 0.1 | ±0.1 | 11.6 | ±4.0 | 16.0 | ±4.9 | 3.3 | ±1.0 | 1.8 | ±0.4 | 0.8 | ±0.4 | 0.2 | ±0.1 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Poa angustifolia</i> | 0.4 | ±0.3 | 0.1 | ±0.1 | 0.0 | ±0.0 | 0.3 | ±0.2 | 2.1 | ±1.1 | 1.1 | ±0.6 | 9.6 | ±6.4 | 7.2 | ±3.2 | 17.6 | ±11.0 | 14.4 | ±4.8 | 28.2 | ±6.8 | 27.8 | ±6.6 |
| <i>Poa pratensis</i> | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.4 | ±0.4 | 1.4 | ±0.9 | 10.8 | ±5.3 | 15.0 | ±6.9 | 11.0 | ±6.1 | 14.4 | ±6.6 | 13.0 | ±5.9 | 10.9 | ±6.5 |
| <i>Potentilla argentea</i> | 0.2 | ±0.1 | 0.3 | ±0.3 | 0.8 | ±0.4 | 0.9 | ±0.6 | 1.4 | ±0.6 | 0.7 | ±0.3 | 3.9 | ±1.6 | 9.0 | ±3.6 | 0.7 | ±0.4 | 0.8 | ±0.6 | 0.4 | ±0.3 | 0.0 | ±0.0 |
| <i>Rumex acetosella</i> | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |
| <i>Trifolium arvense</i> | 0.1 | ±0.1 | 0.0 | ±0.0 | 0.1 | ±0.1 | 0.5 | ±0.1 | 0.2 | ±0.1 | 0.1 | ±0.0 | 0.1 | ±0.1 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 | 0.0 | ±0.0 |