**Supplementary Material**

Supplementary Table 1. Mean isotope values for each of 62 species

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Species | Family | Functional group | Mean δ15N | Mean δ13C |
| *Angelica grayi* | Apiaceae | Forb | -1.42705 | -29.8801 |
| *Oreoxis alpina* | Apiaceae | Forb | -3.13854 | -26.9411 |
| *Antennaria media* | Asteraceae | Forb | 0.347703 | -26.9023 |
| *Antennaria rosea* | Asteraceae | Forb | -0.73262 | -25.9745 |
| *Artemisia arctica* | Asteraceae | Forb | -2.03287 | -28.1945 |
| *Artemisia scopulorum* | Asteraceae | Forb | -1.4221 | -28.5373 |
| *Cirsium scopulorum* | Asteraceae | Forb | -1.59712 | -26.8806 |
| *Erigeron melanocephalus* | Asteraceae | Forb | -1.55108 | -28.2583 |
| *Erigeron pinnatisectus* | Asteraceae | Forb | -2.95142 | -27.7673 |
| *Erigeron simplex* | Asteraceae | Forb | -1.48394 | -28.1437 |
| *Senecio fremontii* | Asteraceae | Forb | -3.38198 | -29.1469 |
| *Tetraneuris acaulis* | Asteraceae | Forb | -0.87676 | -25.6595 |
| *Hymenoxys grandiflora* | Asteraceae | Forb | -1.19299 | -27.3755 |
| *Eritrichium nanum* | Boraginaceae | Forb | -2.96747 | -27.2604 |
| *Mertensia lanceolata* | Boraginaceae | Forb | -0.23383 | -27.9698 |
| *Draba crassifolia* | Brassicaceae | Forb | 2.965355 | -26.3877 |
| *Arenaria fendleri* | Caryophyllaceae | Forb | -1.06706 | -27.2981 |
| *Minuartia obtusiloba* | Caryophyllaceae | Forb | -1.07875 | -27.3032 |
| *Silene acaulis* | Caryophyllaceae | Forb | 0.065092 | -25.4342 |
| *Stellaria umbellata* | Caryophyllaceae | Forb | -0.28723 | -29.225 |
| *Sedum lanceolatum* | Crassulaceae | Forb | -1.79133 | -26.4461 |
| *Gentiana algida* | Gentianaceae | Forb | 1.199709 | -26.8042 |
| *Lloydia serotina* | Liliaceae | Forb | -1.17772 | -25.0833 |
| *Castilleja occidentalis* | Orobranchaceae | Forb | 0.235086 | -28.4376 |
| *Pedicularis groenlandica* | Orobranchaceae | Forb | 1.639541 | -28.6262 |
| *Phlox pulvinata* | Polemoniaceae | Forb | -2.65099 | -28.2927 |
| *Oxyria digyna* | Polygonaceae | Forb | -1.70019 | -28.4405 |
| *Paronychia pulvinata* | Polygonaceae | Forb | -1.22812 | -26.0999 |
| *Bistorta bistortoides* | Polygonaceae | Forb | 0.54241 | -27.369 |
| *Bistorta viviparum* | Polygonaceae | Forb | 0.966662 | -26.8467 |
| *Primula parryi* | Primulaceae | Forb | -0.83107 | -25.3016 |
| *Caltha leptosepala* | Ranunculaceae | Forb | -0.71647 | -26.5955 |
| *Ranunculus adoneus* | Ranunculaceae | Forb | -0.73883 | -26.3695 |
| *Dryas octopetala* | Rosaceae | Forb | -0.93536 | -27.4404 |
| *Geum rossii* | Rosaceae | Forb | -0.20873 | -26.8118 |
| *Potentilla diversifolia* | Rosaceae | Forb | -1.42432 | -26.6574 |
| *Sibbaldia procumbens* | Rosaceae | Forb | 0.165595 | -27.0414 |
| *Besseya alpina* | Scrophulariaceae | Forb | -2.18539 | -29.6413 |
| *Carex albonigra* | Cyperaceae | Graminoid | -4.43429 | -26.8349 |
| *Carex elynoides* | Cyperaceae | Graminoid | -4.30962 | -25.5602 |
| *Carex haydeniana* | Cyperaceae | Graminoid | -0.19473 | -26.0505 |
| *Carex heteroneura* | Cyperaceae | Graminoid | -1.09424 | -25.2246 |
| *Carex lachenalii* | Cyperaceae | Graminoid | -0.34446 | -27.4033 |
| *Carex perglobosa* | Cyperaceae | Graminoid | -4.13385 | -26.333 |
| *Carex phaeocephala* | Cyperaceae | Graminoid | -4.32405 | -27.297 |
| *Carex pyrenaica* | Cyperaceae | Graminoid | -1.59725 | -26.2382 |
| *Carex rupestris* | Cyperaceae | Graminoid | -1.87347 | -25.6958 |
| *Carex scopulorum* | Cyperaceae | Graminoid | 2.450562 | -26.258 |
| *Kobresia myosuroides* | Cyperaceae | Graminoid | -1.15172 | -26.1738 |
| *Juncus drummondii* | Juncaceae | Graminoid | 2.648734 | -25.6878 |
| *Luzula spicata* | Juncaceae | Graminoid | -0.74869 | -27.2016 |
| *Calamagrostis purpurascens* | Poaceae | Graminoid | -1.11659 | -24.7803 |
| *Deschampsia cespitosa* | Poaceae | Graminoid | 0.437937 | -26.6307 |
| *Elymus scribneri* | Poaceae | Graminoid | 0.248101 | -27.3611 |
| *Festuca brachyphylla* | Poaceae | Graminoid | -0.6425 | -26.3692 |
| *Trisetum spicatum* | Poaceae | Graminoid | -1.73252 | -28.4203 |
| *Trifolium dasyphyllum* | Fabaceae | N fixing Forb | -0.43103 | -27.2997 |
| *Trifolium parryi* | Fabaceae | N Fixing Forb | -0.61177 | -27.3166 |
| *Salix glauca* | Salicaceae | Shrub | -0.56828 | -26.5468 |
| *Salix petrophila* | Salicaceae | Shrub | 0.650729 | -26.5646 |
| *Salix planifolia* | Salicaceae | Shrub | -2.04392 | -27.2793 |
| *Salix reticulata* | Salicaceae | Shrub | -0.88636 | -27.0354 |