

Supplement

Enhancing floral resources for pollinators in harvested conifer forests of the Pacific Northwest

Table S1: Evaluation of abundance, cover, and floral abundance thresholds of plant species seeded in burned slash pile plots compared to harvested stand plots. Success was determined by surpassing thresholds defined in the methods. A ✓ marks if thresholds were met (see methods).

Genus Species	Burned slash pile			Harvested forest stand		
	Abundance	Cover	Floral abundance	Abundance	Cover	Floral abundance
<i>Achillea millefolium</i>	✓	✓	✓			
<i>Collinsia grandiflora</i>	✓	✓	✓	✓		✓
<i>Collomia grandiflora</i>	✓	✓	✓	✓		
<i>Eriophyllum lanatum</i>	✓	✓	✓	✓		
<i>Erythranthe guttata</i>	✓	✓	✓			
<i>Geum macrophyllum</i>	✓	✓				
<i>Gilia capitata</i>	✓	✓	✓	✓	✓	✓
<i>Iris tenax</i>	✓					
<i>Ligusticum apifolium</i>						
<i>Lomatium dissectum</i>						
<i>Lomatium utriculatum</i>	✓					
<i>Lupinus latifolius</i>	✓	✓				
<i>Lupinus rivularis</i>	✓					
<i>Madia gracilis</i>	✓	✓	✓			
<i>Microsteris gracilis</i>	✓	✓	✓			
<i>Phacelia heterophylla</i>	✓	✓	✓			
<i>Potentilla glandulosa</i>	✓					
<i>Potentilla gracilis</i> var. <i>gracilis</i>	✓					
<i>Sidalcea campestris</i>	✓					
<i>Sidalcea malviflora</i>	✓					

Table S2: Comparison of plant species metrics over three years post-seed sowing in burned slash piles. Success was determined by surpassing thresholds defined in the methods. * Late-blooming species might have been underrepresented in Year 2 and 3. A ✓ marks if the success threshold was met (see methods).

Genus Species	Year 1			Year 2			Year 3		
	Abundance	Cover	Floral abundance	Abundance	Cover	Floral abundance	Abundance	Cover	Floral abundance
<i>Achillea millefolium</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Collinsia grandiflora</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Collomia grandiflora</i> *	✓	✓	✓	✓			✓		
<i>Eriophyllum lanatum</i>	✓	✓	✓	✓	✓		✓	✓	
<i>Erythranthe guttata</i>	✓	✓	✓	✓		✓	✓		
<i>Geum macrophyllum</i>	✓	✓		✓		✓	✓		
<i>Gilia capitata</i>	✓	✓	✓	✓			✓		
<i>Iris tenax</i>	✓			✓			✓		
<i>Ligusticum apifolium</i> *				✓			✓		
<i>Lomatium dissectum</i>				✓			✓		
<i>Lomatium utriculatum</i>	✓			✓		✓	✓	✓	✓
<i>Lupinus latifolius</i>	✓	✓		✓					
<i>Lupinus rivularis</i>	✓			✓	✓		✓		
<i>Madia gracilis</i>	✓	✓	✓	✓	✓		✓	✓	
<i>Microsteris gracilis</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Phacelia heterophylla</i>	✓	✓	✓	✓	✓		✓		
<i>Potentilla glandulosa</i> *	✓			✓	✓		✓		✓
<i>Potentilla gracilis</i> var. <i>gracilis</i> *	✓			✓			✓	✓	
<i>Sidalcea campestris</i>	✓			✓			✓	✓	
<i>Sidalcea malviflora</i>	✓			✓			✓		

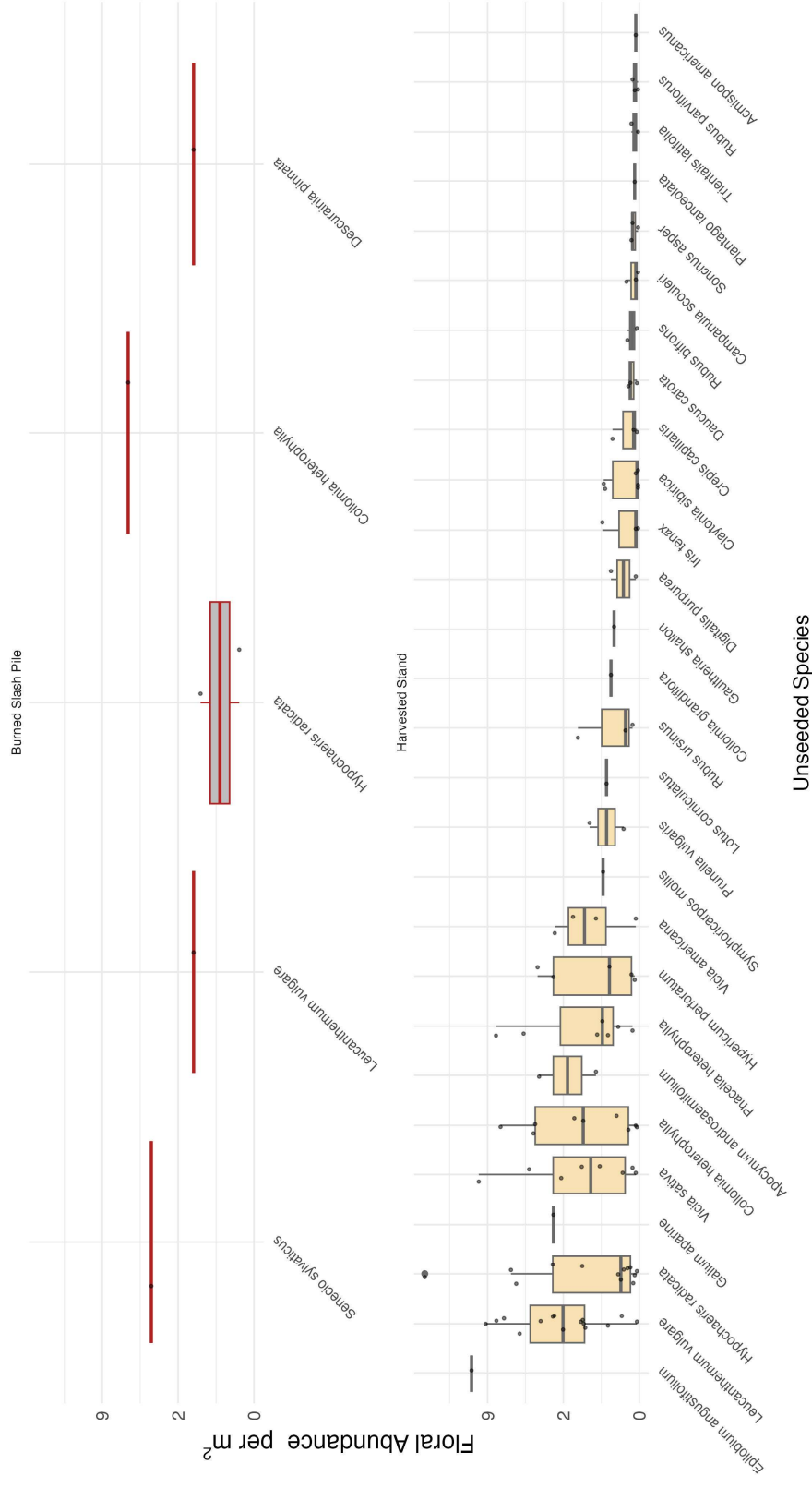


Figure S1: Floral abundance of unseeded, pollinator-associated species in unenhanced harvested forest stands and unenhanced burned slash piles. Data (overlay-ed points) represent observed bloom abundance from 13 4 m² burned slash pile plots and 15 56 m² harvested forest stand plots, summarized across data collected 2-3 years post-seeding enhancements in the burned slash pile plots. Floral abundance is the total number of flowers counted for each species across the set survey area (56 m² for harvested stands and 4 m² for burned slash piles). The central box represents the interquartile range (IQR), with the lower and upper edges corresponding to the first (Q1, 25th percentile) and third quartiles (Q3, 75th percentile). The horizontal line within the box denotes the median. Whiskers extend to the smallest and largest values within 1.5 times the IQR from Q1 and Q3, while individual points beyond this range are plotted as outliers.

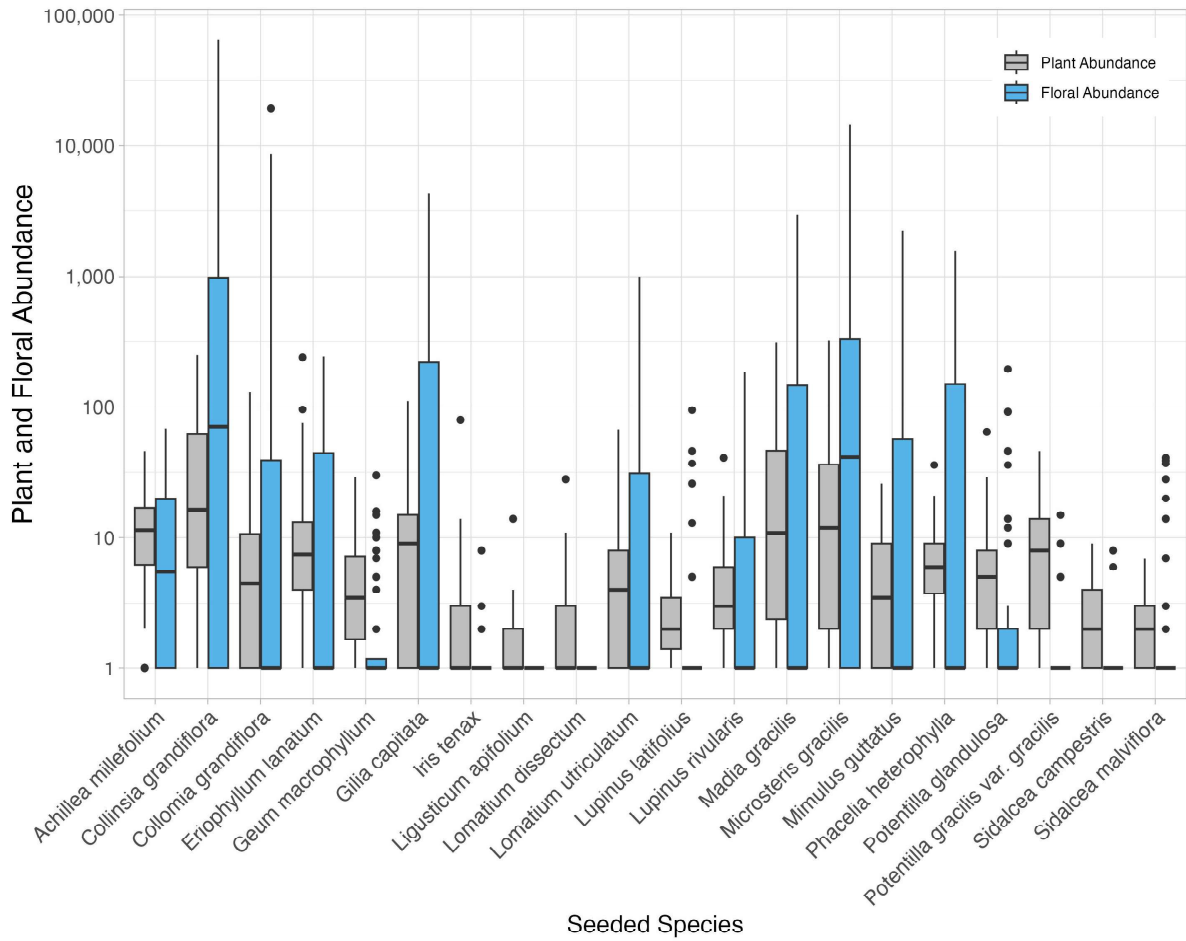


Figure S2: Comparison of plant and floral abundance for each species seeded in burned slash pile subplots over three years post-seeding. Plant abundance represents the total count of individual plants of each seeded species within a subplot, while floral abundance reflects the total count of blooms observed for each species in a subplot as well.

Table S3: List of unseeded resources surveyed in the burned slash pile and harvested stand. Occurrence represents the number of visits during which the species was observed. Floral abundance indicates the average floral abundance across all survey visits, with standard deviation included.

Genus Species	Harvested Stand		Burned Slash Pile	
	Occurrence	Floral Abundance	Occurrence	Floral Abundance
Pollinator Visited				
<i>Acemispom americanus</i>	1	3 ± 0	0	0 ± 0
<i>Apocynum androsaemifolium</i>	2	126 ± 104.65	0	0 ± 0
<i>Campanula scouleri</i>	3	5.33 ± 5.86	0	0 ± 0
<i>Claytonia sibirica</i>	6	14 ± 19.39	0	0 ± 0
<i>Collomia grandiflora</i>	1	30 ± 0	0	0 ± 0
<i>Collomia heterophylla</i>	9	116.64 ± 137.9	1	23 ± 0
<i>Crepis capillaris</i>	3	11.67 ± 14.22	0	0 ± 0
<i>Daucus carota</i>	3	6.67 ± 4.16	0	0 ± 0
<i>Descurainia pinnata</i>	0	0 ± 0	1	6 ± 0
<i>Digitalis purpurea</i>	2	16.5 ± 19.09	0	0 ± 0
<i>Epilobium angustifolium</i>	1	658 ± 0	0	0 ± 0
<i>Galium aparine</i>	1	150 ± 0	0	0 ± 0
<i>Gaultheria shallon</i>	1	26.02 ± 0	0	0 ± 0
<i>Hypericum perforatum</i>	5	79.8 ± 92.45	0	0 ± 0
<i>Hypochaeris radicata</i>	13	181.02 ± 383.32	2	3 ± 2.83
<i>Iris tenax</i>	3	15.33 ± 23.12	0	0 ± 0
<i>Leucanthemum vulgare</i>	15	172.75 ± 160.39	1	6 ± 0
<i>Lotus corniculatus</i>	1	36 ± 0	0	0 ± 0
<i>Phacelia heterophylla</i>	7	122.57 ± 165.09	0	0 ± 0
<i>Plantago lanceolata</i>	1	4 ± 0	0	0 ± 0
<i>Prunella vulgaris</i>	2	39 ± 33.94	0	0 ± 0
<i>Rubus bifrons</i>	2	6.5 ± 6.36	0	0 ± 0
<i>Rubus parviflorus</i>	3	3.67 ± 2.52	0	0 ± 0
<i>Rubus ursinus</i>	3	35 ± 44.31	0	0 ± 0
<i>Senecio sylvaticus</i>	0	0 ± 0	1	15 ± 0
<i>Sonchus asper</i>	3	4.67 ± 3.21	0	0 ± 0
<i>Symphoricarpos mollis</i>	1	41 ± 0	0	0 ± 0
<i>Trientalis latifolia</i>	2	4 ± 4.24	0	0 ± 0
<i>Vicia americana</i>	4	74.45 ± 61.12	0	0 ± 0
<i>Vicia sativa</i>	8	137.75 ± 197.28	0	0 ± 0
Not Pollinator Visited				
<i>Acemispom parviflorus</i>	5	220.36 ± 352.21	0	0 ± 0
<i>Descurainia sp.</i>	0	0 ± 0	1	240 ± 0
<i>Dianthus armeria</i>	3	31 ± 39.05	0	0 ± 0
<i>Erigeron strigosus var. septentrionalis</i>	1	3 ± 0	0	0 ± 0
<i>Galium triflorum</i>	5	59.2 ± 85.07	0	0 ± 0
<i>Geranium columbinum</i>	1	7 ± 0	0	0 ± 0
<i>Geranium dissectum</i>	1	4 ± 0	0	0 ± 0
<i>Hypericum anagalloides</i>	1	7 ± 0	0	0 ± 0
<i>Lotus micranthus</i>	2	23 ± 7.07	0	0 ± 0
<i>Myosotis discolor</i>	3	134.67 ± 141.29	0	0 ± 0
<i>Phlox gracilis</i>	2	14 ± 15.56	0	0 ± 0
<i>Plantago sp.</i>	1	100 ± 0	0	0 ± 0
<i>Rosa gymnocarpa</i>	1	15 ± 0	0	0 ± 0
<i>Senecio vulgaris</i>	5	52 ± 64.43	1	15 ± 0
<i>Silene antirrhina</i>	1	7 ± 0	0	0 ± 0
<i>Taraxacum officinale</i>	1	9 ± 0	0	0 ± 0
<i>Trifolium campestre</i>	5	132.9 ± 170.03	0	0 ± 0
<i>Trifolium dubium</i>	6	196.84 ± 142.83	0	0 ± 0
<i>Veronica officinalis</i>	1	25 ± 0	0	0 ± 0
<i>Vicia hirsuta</i>	4	819.99 ± 182.2	0	0 ± 0
<i>Vicia tetrasperma</i>	1	30 ± 0	0	0 ± 0
<i>Vicia villosa</i>	1	3 ± 0	0	0 ± 0