

Table S2: Rate of representation (%) of each species for each identified region in figure 1 at the last glacial maximum 21,000 years before the present, as projected in the average of all model runs for both palaeoclimate simulations. Percentages <1% have been removed. The total count of species projected as present in a given region (of the 22 included species, where representation was $\geq 1\%$) is also listed (Species count).

Species	North coast				South coast				North interior basins				South interior basins							
	Central AK	Western AK	Haida Gwaii	Vancouver Isl.	CA Coast	Klamath Mtns.	Sierra Nevada	S. CA Mtns.	Columbia Plateau	Northern Basin	Snake R. Plains	Willamette	WY Basin	AZ Mtns.	Colorado Plateau	Central Basin	NM Plateau	SW Tablelands	High Plains	Mexico
Mesic: coastal																				
<i>A. amabilis</i>	-	-	16	7	3	28	11	3	6	4	4	8	4	-	-	-	1	-	-	5
<i>A. procera</i>	-	-	-	-	5	51	25	9	-	-	-	-	-	1	-	2	-	-	-	7
<i>A. macrophyllum</i>	-	-	-	-	27	24	25	12	-	-	-	-	-	-	-	-	-	-	-	12
<i>A. rubra</i>	-	-	-	-	46	25	14	4	-	-	-	-	-	1	1	1	-	-	-	8
<i>C. decurrens</i>	-	-	-	-	13	15	23	26	-	1	-	-	-	4	-	3	-	-	-	17
<i>C. nootkatensis</i>	-	-	37	7	15	25	2	3	-	-	-	-	-	-	-	-	-	-	-	11
<i>P. sitchensis</i>	-	-	9	4	51	21	3	1	-	-	-	-	1	-	-	-	1	1	1	7
Mesic: coastal & interior																				
<i>P. monticola</i>	-	-	-	-	12	30	26	12	2	3	1	2	1	3	1	2	-	-	-	5
<i>P. menziesii</i>	-	-	-	-	13	13	11	9	-	2	1	1	1	9	5	6	3	12	3	11
<i>T. plicata</i>	-	-	9	4	18	33	9	3	-	-	-	-	-	1	-	-	-	14	-	9
<i>T. heterophylla</i>	-	-	11	5	26	30	7	2	2	1	1	3	1	-	-	-	-	2	-	9
<i>T. mertensiana</i>	-	-	2	1	7	48	28	8	-	1	-	-	-	1	-	1	-	-	-	3
Boreal & sub-boreal																				
<i>P. glauca</i>	-	19	7	7	-	-	-	-	-	-	-	-	2	-	1	1	1	15	47	-
<i>P. mariana</i>	-	18	17	17	-	-	-	-	-	-	-	-	1	-	-	-	1	1	43	-
<i>P. contorta</i>	3	3	5	4	5	10	8	5	3	3	3	3	5	4	6	7	8	5	9	1
<i>P. tremuloides</i>	-	1	2	2	-	1	-	2	1	1	1	-	1	18	10	10	5	21	20	4

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Table S2 – continued from previous page

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	Central AK	Western AK	Haida Gwaii	Vancouver Isl.	CA Coast	Klamath Mtns.	Sierra Nevada	S. CA Mtns.	Columbia Plateau	Northern Basin	Snake R. Plains	Willamette	WY Basin	AZ Mtns.	Colorado Plateau	Central Basin	NM Plateau	SW Tablelands	High Plains	Mexico
Sub-alpine																				
<i>A. lasiocarpa</i>	5	6	1	-	-	5	2	1	9	9	8	10	9	3	6	4	9	5	7	1
<i>P. engelmannii</i>	3	3	-	-	-	1	1	2	2	2	2	2	2	20	14	13	10	13	8	2
<i>P. albicaulis</i>	1	2	-	-	4	7	7	7	10	10	8	12	7	3	4	3	4	8	3	-
Xeric & sub-xeric																				
<i>L. occidentalis</i>	-	-	-	-	1	3	10	15	-	1	-	-	-	26	7	9	-	16	-	12
<i>P. edulis</i>	-	-	-	-	-	-	-	3	-	-	-	-	-	24	3	2	1	16	-	51
<i>P. ponderosa</i>	-	-	-	-	5	2	6	13	-	-	-	-	-	20	3	9	1	23	2	16
<i>Species Count (rate ≤ 1)</i>	4	7	11	9	16	18	18	20	7	11	9	8	12	16	12	15	12	14	10	19