Excerpted from Forest Habitat Types of Montana
(USDA Forest Service General Technical Report INT-34)

APPENDIX E-1

Mean basal areas and 50-year site indexes for Montana stands by habitat type. Means are shown where n = 3 or more; confidence limits (95 percent) for estimating the mean are given where n = 5 or more.

Habitat type	West-side (Kootenai, Flathead, Lolo, and Bitterroot National Forests) Basal area: (ft²/acre)	Site index by species: PIPO	PSME	PICO	LAOC	PICEA	ABGR	ABLA
SCREE	156 ± 73	44 ± 8	38 ± 6	.	.	.	.	.
PIFL/AGSP	.	.	.	.	.	.	.	.
PIFL/FEID	.	.	.	.	.	.	.	.
PIFL/JUCO	.	.	.	.	.	.	.	.
PIPO/AGSP	101 ± 25	45 ± 9	.	.	.	.	.	.
PIPO/FEID	139 ± 21	46 ± 5	.	.	.	.	.	.
PIPO/PUTR	77 ± 28	45 ± 14	.	.	.	.	.	.
PIPO/SYAL	170 ± ?	44 ± ?	.	.	.	.	.	.
PIPO/PRVI	.	.	.	.	.	.	.	.
PSME/AGSP	.	.	.	.	.	.	.	.
PSME/FEID	.	.	.	.	.	.	.	.
PSME/FESC	126 ± 47	36 ± ?	44 ± 7	.	.	.	.	.
PSME/VACA	192 ± 33	62 ± 8	51 ± 6	57 ± 8	59 ± 5	.	.	.
PSME/PHMA	153 ± 20	59 ± 14	58 ± 6	48 ± ?	57 ± ?	.	.	.
PSME/VAGL	185 ± 33	.	44 ± 4	.	.	.	.	.
PSME/LIBO	226 ± 53	.	56 ± 6	50 ± 9	55 ± ?	.	.	.
PSME/SYAL	172 ± 23	54 ± 5	52 ± 4	.	.	.	.	.
PSME/CARU	191 ± 24	50 ± 8	47 ± 6	48 ± ?	.	.	.	.
PSME/CAGE	186 ± ?	.	.	.	.	.	.	.
PSME/SPBE	142 ± ?	63 ± ?	49 ± ?	.	.	.	.	.
PSME/ARUV	.	.	.	.	.	.	.	.
PSME/JUCO	.	.	.	.	.	.	.	.
PSME/ARCO	.	.	.	.	.	.	.	.
PICEA/EQAR	.	.	.	.	.	.	.	.
PICEA/CLUN	241 ± 38	.	60 ± ?	60 ± 2	.	69 ± 6	.	.
PICEA/PHMA	.	.	.	.	.	.	.	.
PICEA/GATR	.	.	.	.	.	.	.	.
PICEA/VACA	.	.	.	65 ± ?	74 ± ?	64 ± ?	.	.
PICEA/SEST	.	.	.	.	.	.	.	.
PICEA/LIBO	.	.	.	.	.	.	.	.
PICEA/SMST	.	.	.	.	.	.	.	.
ABGR/CLUN	254 ± 94	.	71 ± ?	.	.	73 ± ?	58 ± 15	.
ABGR/LIBO	195 ± ?	.	.	.	.	.	54 ± ?	.
THPL/CLUN	305 ± 96	.	66 ± ?	.	63 ± ?	72 ± 14	61 ± ?	74 ± ?
TSHE/CLUN	267 ± 55	(PIMO--62 ± ?)		.	80 ± ?	77 ± ?	50 ± ?	.
ABLA/OPHO	351 ± ?	.	.	.	.	69 ± ?	.	.
ABLA/CLUN	248 ± 24	.	66 ± 7	60 ± 5	63 ± 6	66 ± 6	55 ± 9	59 ± 6
ABLA/GATR	196 ± 47	.	.	50 ± 12	.	58 ± 9	.	67 ± 22
ABLA/VACA	.	.	.	.	.	.	.	.
ABLA/CACA	177 ± ?	.	.	50 ± 7	.	51 ± 5	.	48 ± ?
ABLA/LIBO	166 ± 35	.	46 ± 9	55 ± 7	56 ± ?	.	.	53 ± 12
ABLA/MEFE	172 ± 26	.	50 ± 8	56 ± 6	67 ± ?	60 ± 10	.	57 ± 9
ABLA/XETE	188 ± 26	.	40 ± 6	45 ± 6	51 ± ?	56 ± ?	.	47 ± 6
TSME/XETE	114 ± ?	.	.	.	.	.	.	.
ABLA/VAGL	.	.	.	.	.	.	.	.
ABLA/VASC, THOC	.	.	.	.	.	.	.	.
ABLA/VASC, other	.	.	.	.	.	.	.	.
ABLA/ALSI	.	.	.	.	.	.	.	.
ABLA/CARU	.	.	.	.	.	.	.	.
ABLA/CLPS	.	.	.	.	.	.	.	.
ABLA/ARCO	.	.	.	.	.	.	.	.
ABLA/CAGE	.	.	.	.	.	.	.	.
ABLA/RIMO	.	.	.	.	.	.	.	.
ABLA-PIAL/VASC	.	.	.	.	.	.	.	.
ABLA/LUHI	187 ± 30	.	.	35 ± 8	.	43 ± 9	.	31 ± 5
PIAL-ABLA	146 ± 49	.	.	.	.	.	.	16 ± ?
LALY-ABLA	.	.	.	.	.	20 ± ?	.	14 ± 4
PIAL	.	.	.	.	.	.	.	.
PICO/PUTR h.t.	.	.	.	.	.	.	.	.
PICO/VACA c.t.	.	.	.	.	.	.	.	.
PICO/LIBO c.t.	.	.	.	.	.	.	.	.
PICO/VASC c.t.	.	.	.	.	.	.	.	.
PICO/CARU c.t.	.	.	.	.	.	.	.	.

Habitat type	East-side (Deerlodge, Beaverhead, Helena, Lewis and Clark, Gallatin, and Custer National Forests) Basal area: (ft²/acre)	Site index by species: PIPO	PSME	PICO	PICEA	ABLA
SCREE	64 ± 24	.	21 ± ?	.	.	.
PIFL/AGSP	89 ± 40	.	.	.	.	.
PIFL/FEID	91 ± 23	.	24 ± 5	.	.	.
PIFL/JUCO	139 ± 79	.	25 ± 7	.	.	.
PIPO/AGSP	111 ± 17	30 ± 10	.	.	.	.
PIPO/FEID	135 ± 36	29 ± 12	.	.	.	.
PIPO/PUTR	96 ± ?	26 ± ?	.	.	.	.
PIPO/SYAL	168 ± 42	41 ± 6	.	.	.	.
PIPO/PRVI	140 ± 10	47 ± ?	.	.	.	.
PSME/AGSP	133 ± 38	34 ± ?	29 ± 4	.	.	.
PSME/FEID	128 ± 39	.	32 ± 5	.	.	.
PSME/FESC	159 ± 85	.	22 ± ?	.	.	.
PSME/VACA	191 ± 130	.	.	49 ± ?	.	.
PSME/PHMA	182 ± 32	.	43 ± 8	.	.	.
PSME/VAGL	163 ± 37	.	41 ± ?	48 ± 15	.	.
PSME/LIBO	192 ± 56	.	.	47 ± ?	.	.
PSME/SYAL	196 ± 26	43 ± 11	41 ± 4	46 ± 7	.	.
PSME/CARU	206 ± 19	45 ± ?	38 ± 3	45 ± 4	.	.
PSME/CAGE	253 ± 67	.	36 ± ?	.	.	.
PSME/SPBE	195 ± 62	.	.	.	.	.
PSME/ARUV	138 ± 35	41 ± 17	28 ± 7	.	.	.
PSME/JUCO	196 ± 34	.	40 ± ?	41 ± 6	.	.
PSME/ARCO	210 ± 44	.	36 ± 4	.	.	.
PICEA/EQAR	203 ± 45	.	.	.	51 ± 11	.
PICEA/CLUN	.	.	.	.	.	.
PICEA/PHMA	199 ± ?	.	58 ± ?	.	50 ± ?	.
PICEA/GATR	234 ± 41	.	.	53 ± ?	58 ± 7	.
PICEA/VACA	.	.	.	.	.	.
PICEA/SEST	.	.	.	.	29 ± ?	.
PICEA/LIBO	177 ± 17	.	40 ± ?	49 ± 4	52 ± 9	.
PICEA/SMST	224 ± 40	.	44 ± 8	.	53 ± 14	.
ABGR/CLUN	.	.	.	.	.	.
ABGR/LIBO	.	.	.	.	.	.
THPL/CLUN	.	.	.	.	.	.
TSHE/CLUN	.	.	.	.	.	.
ABLA/OPHO	.	.	.	.	.	.
ABLA/CLUN	203 ± 73	.	.	.	44 ± 8	40 ± ?
ABLA/GATR	244 ± 27	.	46 ± ?	43 ± ?	53 ± 6	47 ± 5
ABLA/VACA	177 ± 33	.	.	47 ± 3	47 ± ?	.
ABLA/CACA	247 ± 56	.	.	50 ± 13	45 ± 4	43 ± 5
ABLA/LIBO	191 ± 20	.	43 ± 9	46 ± 11	44 ± 5	43 ± 11
ABLA/MEFE	195 ± 41	.	.	.	50 ± ?	52 ± ?
ABLA/XETE	226 ± 39	.	.	43 ± ?	.	.
TSME/XETE	.	.	.	.	.	.
ABLA/VAGL	201 ± 33	.	.	42 ± 4	43 ± ?	42 ± 5
ABLA/VASC, THOC	295 ± 33	.	.	45 ± 4	46 ± 11	40 ± 7
ABLA/VASC, other	175 ± 20	.	.	40 ± 5	45 ± 7	40 ± 5
ABLA/ALSI	.	.	.	.	50 ± ?	46 ± ?
ABLA/CARU	222 ± 85	.	40 ± 10	.	57 ± ?	50 ± 12
ABLA/CLPS	268 ± 51	.	30 ± ?	.	33 ± 5	40 ± 7
ABLA/ARCO	220 ± 41	.	43 ± 6	41 ± 3	45 ± 7	47 ± 3
ABLA/CAGE	.	.	.	.	.	40 ± 12
ABLA/RIMO	.	.	.	.	.	40 ± ?
ABLA-PIAL/VASC	245 ± 24	.	.	33 ± 5	31 ± 5	32 ± 3
ABLA/LUHI	256 ± 73	.	.	.	38 ± 17	34 ± 8
PIAL-ABLA	247 ± 63	.	.	.	.	25 ± ?
LALY-ABLA	.	.	.	.	.	.
PIAL	199 ± 39	.	.	.	.	21 ± ?
PICO/PUTR h.t.	130 ± ?	.	.	40 ± ?	.	.
PICO/VACA c.t.	184 ± 27	.	.	50 ± 5	.	.
PICO/LIBO c.t.	193 ± 29	.	.	52 ± 7	.	.
PICO/VASC c.t.	166 ± 22	.	.	41 ± 4	.	.
PICO/CARU c.t.	159 ± 22	.	.	47 ± 12	.	.

APPENDIX E-2

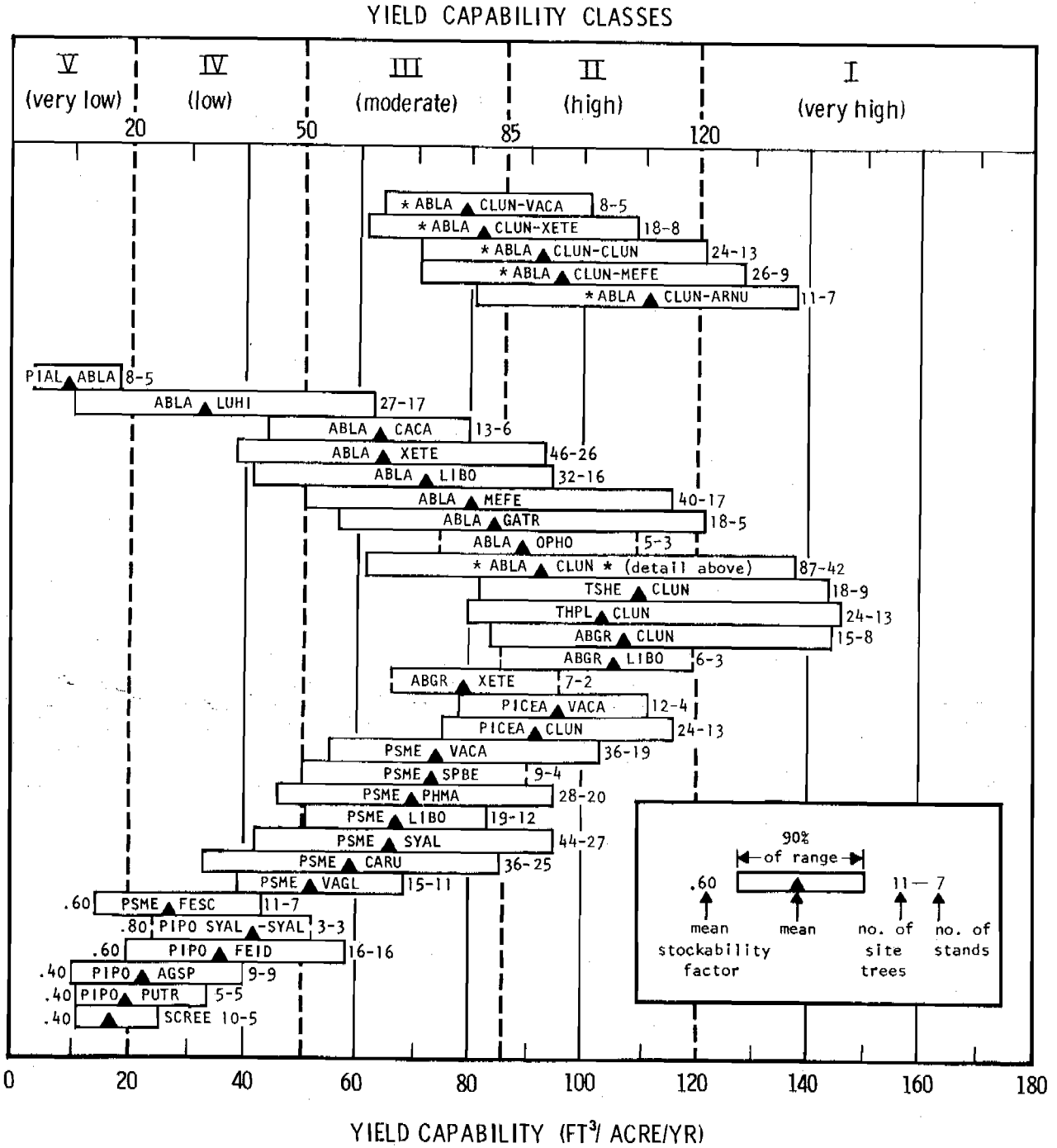
Mean maximum heights (in feet) for Montana stands by tree species and habitat type. Means are shown where n = 3 or more; confidence limits (95 percent) for estimating the mean are given where n = 5 or more.

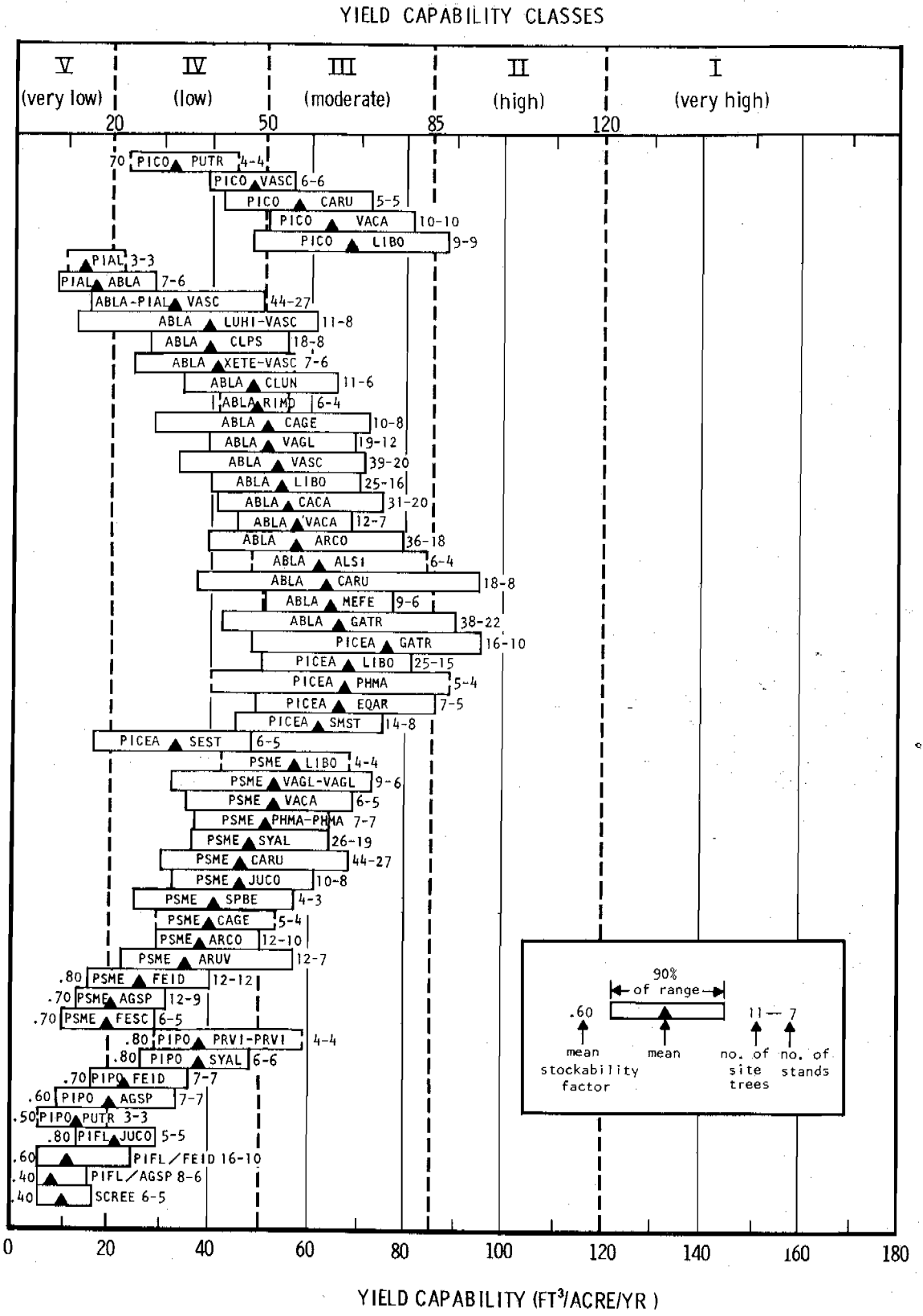
Habitat type	Maximum height by species for the West-side (Kootenai, Flathead, Lolo, and Bitterroot National Forests)						
	PIPO	PSME	PICO	LAOC	PICEA	ABLA	PIAL
SCREE	106 ± ?	.	.	.	.	.	.
PIFL/AGSP	.	.	.	.	.	.	.
PIFL/FEID	.	.	.	.	.	.	.
PIFL/JUCO	.	.	.	.	.	.	.
PIPO/AGSP	.	.	.	.	.	.	.
PIPO/FEID	106 ± ?	.	.	.	.	.	.
PIPO/SYAL	.	.	.	.	.	.	.
PIPO/PRVI	.	.	.	.	.	.	.
PSME/AGSP	.	.	.	.	.	.	.
PSME/FEID	.	.	.	.	.	.	.
PSME/FESC	89 ± ?	77 ± ?	.	.	.	.	.
PSME/VACA	123 ± 10	104 ± 7	.	128 ± 14	.	.	.
PSME/PHMA	118 ± 20	101 ± ?	.	.	.	.	.
PSME/VAGL	115 ± 15	85 ± 11	.	.	.	.	.
PSME/LIBO	.	89 ± ?	.	106 ± 17	.	.	.
PSME/SYAL	113 ± 18	.	.	.	.	.	.
PSME/CARU	105 ± 7	91 ± 6	.	.	.	.	.
PSME/CAGE	.	.	.	.	.	.	.
PSME/SPBE	.	.	.	.	.	.	.
PSME/ARUV	.	.	.	.	.	.	.
PSME/JUCO	.	.	.	.	.	.	.
PSME/ARCO	.	.	.	.	.	.	.
PICEA/EQAR	.	.	.	.	.	.	.
PICEA/CLUN	.	.	.	135 ± 8	.	.	.
PICEA/PHMA	.	.	.	.	.	.	.
PICEA/GATR	.	.	.	.	.	.	.
PICEA/SEST	.	.	.	.	.	.	.
PICEA/LIBO	.	.	.	.	.	.	.
PICEA/SMST	.	.	.	.	.	.	.
ABGR/CLUN	.	107 ± ?	.	.	.	.	.
ABGR/LIBO	.	98 ± ?	.	117 ± ?	.	.	.
THPL/CLUN	.	127 ± ?	.	149 ± 21	141 ± ?	135 ± ?	.
TSHE/CLUN	.	.	.	129 ± 21	141 ± ?	.	.
ABLA/CLUN	.	124 ± 9	.	133 ± 7	132 ± 32	120 ± ?	.
ABLA/GATR	.	.	.	.	.	.	.
ABLA/CACA	.	.	94 ± 10	.	110 ± ?	.	.
ABLA/LIBO	.	101 ± ?	.	113 ± ?	.	.	.
ABLA/MEFE	.	95 ± ?	88 ± 8	106 ± 17	109 ± 7	96 ± 10	.
ABLA/XETE	.	86 ± 8	82 ± ?	96 ± 10	.	.	.
ABLA/VAGL	.	.	.	.	.	.	.
ABLA/VASC, THOC	.	.	.	.	.	.	.
ABLA/VASC, other	.	.	.	.	.	.	.
ABLA/CARU	.	.	.	.	.	.	.
ABLA/CLPS	.	.	.	.	.	.	.
ABLA/ARCO	.	.	.	.	.	.	.
ABLA/CAGE, PSME	.	.	.	.	.	.	.
ABLA-PIAL/VASC	.	.	.	.	.	.	.
ABLA/LUHI	.	.	67 ± 9	.	94 ± 11	70 ± 8	64 ± 6
PIAL-ABLA	.	.	.	.	.	.	55 ± 8
LALY-ABLA	.	.	.	.	54 ± 10	46 ± ?	.
PIAL	.	.	.	.	.	.	.
PICO/VACA c.t.	.	.	.	.	.	.	.
PICO/LIBO c.t.	.	.	.	.	.	.	.
PICO/VASC c.t.	.	.	.	.	.	.	.

Habitat type	Maximum height by species for the East-side (Deerlodge, Beaverhead, Helena, Lewis and Clark, Gallatin, and Custer National Forests)						
	PIFL	PIPO	PSME	PICO	PICEA	ABLA	PIAL
SCREE	30 ± ?	.	58 ± ?	.	.	.	.
PIFL/AGSP	31 ± 12	.	.	.	.	.	.
PIFL/FEID	39 ± 8	.	43 ± 14	.	.	.	.
PIFL/JUCO	35 ± 11	.	39 ± ?	.	.	.	.
PIPO/AGSP	.	57 ± 12	.	.	.	.	.
PIPO/FEID	.	74 ± 10	.	.	.	.	.
PIPO/SYAL	.	76 ± ?	.	.	.	.	.
PIPO/PRVI	.	83 ± 8	.	.	.	.	.
PSME/AGSP	.	69 ± 19	60 ± 8	.	.	.	.
PSME/FEID	.	.	65 ± 8	.	.	.	.
PSME/FESC	.	67 ± ?	58 ± ?	.	.	.	.
PSME/VACA	.	.	.	.	.	.	.
PSME/PHMA	.	.	75 ± 12	.	.	.	.
PSME/VAGL	.	.	.	71 ± ?	.	.	.
PSME/LIBO	.	.	82 ± 6	.	.	.	.
PSME/SYAL	.	.	87 ± 10	.	.	.	.
PSME/CARU	.	.	77 ± 4	71 ± 8	.	.	.
PSME/CAGE	.	.	76 ± 13	.	.	.	.
PSME/SPBE	.	.	57 ± ?	.	.	.	.
PSME/ARUV	.	76 ± 14	.	.	.	.	.
PSME/JUCO	.	.	69 ± 13	.	.	.	.
PSME/ARCO	.	.	73 ± 8	.	.	.	.
PICEA/EQAR	.	.	.	.	110 ± 7	.	.
PICEA/CLUN	.	.	.	.	.	.	.
PICEA/PHMA	.	.	86 ± ?	.	.	.	.
PICEA/GATR	.	.	.	.	109 ± ?	.	.
PICEA/SEST	.	.	.	.	54 ± 11	.	.
PICEA/LIBO	.	.	87 ± ?	88 ± 11	99 ± ?	.	.
PICEA/SMST	.	.	89 ± ?	.	.	.	.
ABGR/CLUN	.	.	.	.	.	.	.
ABGR/LIBO	.	.	.	.	.	.	.
THPL/CLUN	.	.	.	.	.	.	.
TSHE/CLUN	.	.	.	.	.	.	.
ABLA/CLUN	.	.	.	.	.	.	.
ABLA/GATR	.	.	95 ± 17	84 ± 9	102 ± 5	88 ± ?	.
ABLA/CACA	.	.	.	79 ± 10	101 ± 8	.	.
ABLA/LIBO	.	.	86 ± 8	83 ± 8	.	.	.
ABLA/MEFE	.	.	.	82 ± 12	99 ± 11	87 ± ?	.
ABLA/XETE	.	.	.	71 ± 10	90 ± 27	.	.
ABLA/VAGL	.	.	79 ± ?	80 ± 8	.	.	.
ABLA/VASC, THOC	.	.	.	77 ± 6	90 ± 10	.	.
ABLA/VASC, other	.	.	.	71 ± 4	75 ± ?	.	.
ABLA/CARU	.	.	82 ± 10	.	.	.	.
ABLA/CLPS	.	.	64 ± 7	.	70 ± 8	.	.
ABLA/ARCO	.	.	81 ± 9	78 ± ?	80 ± ?	.	.
ABLA/CAGE, PSME	.	.	89 ± 13	.	.	82 ± ?	.
ABLA-PIAL/VASC	.	.	.	66 ± 8	76 ± 8	60 ± 7	57 ± 5
ABLA/LUHI	.	.	.	.	.	.	.
PIAL-ABLA	.	.	.	.	45 ± 15	29 ± 6	42 ± 7
LALY-ABLA	.	.	.	.	.	.	.
PIAL	.	.	.	.	.	.	52 ± ?
PICO/VACA c.t.	.	.	.	83 ± 7	.	.	.
PICO/LIBO c.t.	.	.	.	92 ± 9	.	.	.
PICO/VASC c.t.	.	.	.	67 ± 5	.	.	.

APPENDIX E-3

Estimated yield capabilities of West-side Montana habitat types based on site index data and stockability factors. (Kootenai, Flathead, Lolo, and Bitterroot National Forests)



APPENDIX E-4

Estimated yield capabilities of East-side Montana habitat types based on site index data and stockability factors. (Deerlodge, Beaverhead, Helena, Lewis and Clark, Gallatin, and Custer National Forests)