ESSFdc1 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

May 2001

_						Stock	cing stan	darde	Regen	Δοςρο	sment	Min. t	ree	% tree
			Conifer species		Broadleaf		II-space		delay	Early	Late	heig		over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01	BI – Rhododendron – Grouseberry	PI Se	ВІ			1200	700	600	4	12	20	PI Others	1.6 0.8	125
02	PISe – Pinegrass	PI		BI Se		1000	500	400	7	15	20	PI Others	1.2 0.6	125
03	BI – Grouseberry – Cladonia	PI		BI Se		1000	500	400	7	15	20	PI Others	1.2 0.6	125
04	BI – Rhododendron – Valerian	PI Se	BI			1200	700	600	4	12	20	PI Others	1.6 0.8	125
05	BI – Trapper's tea	PI Se	BI ^{10,13}			1000	500	400	7	15	20	PI Others	1.2 0.6	125
06	BI – Horsetail – Glow moss	PI ¹ Se ^{1,32}	BI ^{1,32}			1000	500	400	4	12	20	PI Others	1.2 0.6	125
07	Sedge – Sphagnum	non-forested				_	_	_	_	_	_	_	-	_

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

p – preferred

¹ elevated microsites are preferred

¹³ restricted to upper elevations of biogeoclimatic unit 32 limited by growing-season frosts

¹⁰ restricted to northerly aspects

ESSFdk — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		ing stan II-spaced		Regen delay	Asses Early	sment Late	Min. t heig		% tree
	Site series	Primary	Secondary	Tertiary	species ⁴		MSSpa	<u> </u>	(yrs)	(yrs)	(yrs)	(m)		over brush
01	BI – Azalea – Foamflower	PI Se	BI Fd ¹⁴ Lw ¹⁴			1200	700	600	7	15	20	PI, Lw Fd Others	1.6 1.0 0.8	125
02	Fd – Douglas maple – Soopolallie	Fd ^{9,14} Lw ^{9,14} PI	Se	BI Pa		1000	500	400	7	15	20	PI, Lw Fd Others	1.2 0.8 0.6	125
03	BI – Azalea – Grouseberry	PI	BI Fd ¹⁴ Lw ¹⁴ Se			1200	700	600	7	15	20	PI, Lw Fd Others	1.6 1.0 0.8	125
04	BI – Azalea – Soopolallie	PI Se	BI Fd ¹⁴ Lw ¹⁴	Pa		1200	700	600	7	15	20	PI, Lw Fd Others	1.6 1.0 0.8	125
05	BI – Azalea – Step moss	BI ³² PI Se ³²				1200	700	600	4	12	20	PI Others	1.6 0.8	125

Continued next page May 2001

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³² limited by growing-season frosts

 ⁹ restricted to southerly aspects
 14 restricted to lower elevations of biogeoclimatic unit

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

ESSFdk — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

____ May 2001 ____

			Conifer species		Broadleaf		ing stan		Regen delay	Asses Early	sment Late	Min. t heig		% tree over
	Site series	Primary	Secondary	Tertiary	species△	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
06	BI – Azalea – Horsetail	BI ³² PI Se ³²				1200	700	600	4	12	20	PI Others	1.6 0.8	125
07	Willow - Sedge	non-forested				_	-	-	-	_	-	-	_	_

32 limited by growing-season frosts

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

ESSFvc — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		ring stan II-spacer		Regen delay	Asses Early	sment Late	Min. t heig		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01	BIHm – Rhododendron – Oak fern	BI Se		Hm		1200	700	600	4	12	20	AII	8.0	125
02	BIHm – Rhododendron – Leafy liverwort	Se	ВІ	Hm Pl ^{23,34}		1000	500	400	7	15	20	PI Others	1.2 0.6	125
03	BIHm – Rhododendron – Pipecleaner moss	BI Se		Hm		1000	500	400	7	15	20	All	0.6	125
04	BIHm – Devil's club – Lady fern	BI Se		Hm		1200	700	600	4	12	20	All	8.0	125
05	BIHm – Horsetail	BI ^{1,32} Se ^{1,32}		Hm ¹		1000	500	400	4	12	20	All	0.6	125
06	Sedge – Sphagnum	non-forested				_	_	_	_	_	_	_	_	_

¹ elevated microsites are preferred 23 restricted to trial use

³² limited by growing-season frosts 34 risk of snow damage

A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

ESSFwc1 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		ing stan II-space		Regen delay	Asses Early	sment Late	Min. tı heigl		% tree
	Site series	Primary	Secondary	Tertiary	species△	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush
01	BI – Rhododendron – Oak fern	BI Se	Pl ³⁴	Cw ^{9,32} Hw ^{9,32}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
02	BI – Falsebox – Grouseberry	PI Se	ВІ	Cw ⁵⁵ Pa		1000	500	400	7	15	20	PI Others	1.2 0.6	125
03	BI – Devil's club – Lady fern	BI Se		Cw ^{9,32} Hw ^{9,32} Pl ³⁴		1200	700	600	4	12	20	PI Others	1.6 0.8	125
04	BI – Horsetail – Brachythecium	BI ^{1,32} Se ^{1,32}	PI ^{1,34}	Hw ³²		1200	700	600	7	15	20	PI Others	1.6 0.8	125
05	Sedge – Sphagnum	non-forested				-	-	-	-	-	-	-	-	-

1 elevated microsites are preferred 9 restricted to southerly aspects

34 risk of snow damage 55 acceptable in sx–sm portion of site series

32 limited by growing-season frosts

May 2001

p – preferred

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

ESSFwc2 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

							ing stan		Regen	Asses		Min. t		% tree
	Site series	Primary	Conifer species Secondary	Tertiary	Broadleaf species [△]		II-spaced MSSpa	<u> </u>	delay (yrs)	Early (yrs)	Late (yrs)	heigi (m)		over brush
01	BI – Azalea – Oak fern	BI Se		PI ^{23,34}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
02	PI – Huckleberry – Cladonia	PI	BI ^{10,13,14} Se ^{10,13}			1000	500	400	7	15	20	PI Others	1.2 0.6	125
03	BI – Huckleberry – Arnica	BI Se	PJ ^{23,34}			1000	500	400	7	15	20	PI Others	1.2 0.6	125
04	BI – Rhododendron – Heron's-bill	BI Se	Pl ^{23,34}			1200	700	600	7	15	20	PI Others	1.6 0.8	125
05	BI – Azalea – Feathermoss	BI Se		PI ^{23,34}		1200	700	600	7	15	20	PI Others	1.6 0.8	125
06	BI – Valerian – Oak fern	BI ³² Se ³²		PI ^{23,34}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
07	BI – Devil's club – Lady fern	BI ³² Se ³²		Pl ^{23,34}		1200	700	600	4	12	20	PI Others	1.6 0.8	125

Continued next page May 2001

¹⁰ restricted to northerly aspects
13 restricted to upper elevations of biogeoclimatic unit 14 restricted to lower elevations of biogeoclimatic unit

²³ restricted to trial use32 limited by growing-season frosts

³⁴ risk of snow damage

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

p - preferred

ESSFwc2 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

May 2001

			Conifer species		Broadleaf		ring stan		Regen delay	Asses Early	sment Late	Min. t		% tree
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush
08	BI – Horsetail – Sphagnum	BI ^{1,32} Se ^{1,32}		Pl ^{23,34}		1000	500	400	4	12	20	PI Others	1.2 0.6	125
09*	PI – Dwarf blueberry – Sphagnum	PI ¹	BI ^{1,32} Se ^{1,32}			400	200	200	4	12	20	PI Others	1.2 0.6	125
10	Sedge – Sphagnum	non-forested				_	_	_	_	_	_	_	_	-

avoid logging
elevated microsites are preferred

32 limited by growing-season frosts 34 risk of snow damage

23 restricted to trial use

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

ESSFwc4 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

							ing stan		Regen	Asses		Min. t		% tree
	Site series	Primary	Conifer species Secondary	Tertiary	Broadleaf species [△]		II-spaced MSSpa	<u> </u>	delay (yrs)	Early (yrs)	Late (yrs)	heigl (m)		over brush
01	BI – Rhododendron – Oak fern	BI Se	PI ³⁴			1200	700	600	4	12	20	PI Others	1.6 0.8	125
02	BI – Rhododendron – Falsebox	Se	PI ³⁴	BI ⁵⁴ Pa		1000	500	400	7	15	20	PI Others	1.2 0.6	125
03	BI – Rhododendron – Woodrush	Se	BI PI ³⁴			1000	500	400	7	15	20	PI Others	1.2 0.6	125
04	BI – Rhododendron – Foamflower	Se	BI PI ³⁴			1200	700	600	4	12	20	PI Others	1.6 0.8	125
05	BI – Rhododendron – Lady fern	BI Se				1200	700	600	4	12	20	All	8.0	125
06	BI – Horsetail – Brachythecium	BI ^{1,32} Se ^{1,32}				1200	700	600	4	12	20	AII	0.8	125
07	BI – Sedge – Sphagnum	Se ¹	BI ¹ PI ^{1,34}			1000	500	400	4	12	20	PI Others	1.2 0.6	125
80	Willow - Sedge	non-forested				_	-	-	-	-	-	_	_	_

¹ elevated microsites are preferred32 limited by growing-season frosts

³⁴ risk of snow damage54 risk of unsuccessful release of advance regeneration

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

ESSFwm — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

May 2001

			Conifer species		Broadleaf	(we	ding stan	d/ha) +	Regen delay	Asses Early	Late	Min. t	ht	% tree over
	Site series	Primary	Secondary	Tertiary	species△	ISSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush
01	BI – Azalea – Arnica	BI Se	Fd ¹⁴ Lw ¹⁴ Pl ³⁴			1200	700	600	4	12	20	Lw, PI Others	2.0 1.0	125
02	BI – Rhododendron – Azalea	Se	PI ³⁴	BI Hw ¹⁴ Pa Pw ^{9,14,31}		1200	700	600	7	15	20	PI Others	2.0 1.0	125
03	BIHw – Rhododendron – Azalea	Fd ^{9,32} Lw ^{9,32} Se	BI PI ³⁴ Pw ^{9,31,32,49}	Hw ^{9,32}		1200	700	600	4	12	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	125
04	BI – Azalea – Queen's cup	BI Se	PI ³⁴	Hw ¹⁴		1200	700	600	4	12	20	PI Others	2.0 1.0	125

9 restricted to southerly aspects

32 limited by growing-season frosts

14 restricted to lower elevations of biogeoclimatic unit

34 risk of snow damage

31 risk of white pine blister rust

49 applies only to rust resistant, planted stock

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

p – preferred

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	Site series	Primary	Conifer species Secondary	econdary Tertiary species [∆] TSSpa MSSpa N					Regen delay (yrs)	Asses Early (yrs)	sment Late (yrs)	Min. t heigl (m)	ht	% tree over brush
01a	CwFd – Falsebox, sx-sm phase	Fd Lw Py	Bg ²⁸ PI Pw ^{31,49}	BI ^{10,13} Cw Hw Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
01b	CwFd – Falsebox, m-shg phase	Fd Lw Pl Py ^{9,14}	Bg Cw Hw Pw ^{31,49} Sx ^{10,13}	BI ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02	FdPy – Oregon grape – Parsley fern	Fd Lw Py		Cw Hw ^{10,13} PI	Epb	1000	500	400	7	12	15	PI, Lw Fd Others	1.4 1.0 0.8	150
03	CwHw – White pine – Devil's club	Fd ^{1,32} Lw ^{1,32} Sx	Bg ³² Cw ³² Hw ³² Pl ¹ Pw ^{31,49}	BI	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
9 i 10 i	elevated microsites are prefe estricted to southerly aspect estricted to northerly aspect estricted to upper elevations	s s	28 limi 31 risk	ricted to lower ele ted by moisture de of white pine blis ted by growing-se	eficit ter rust	ogeoclim	atic unit	a pro	oductive, i	eliable, a	nd feasib	planted sto le regenera y and/or fe Cont	ation o easibili	

A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

ICHdw — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		ing stan		Regen delay	Asses Early	sment Late	Min. t		% tree over
	Site series	Primary	Secondary	Tertiary	species△	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)	1	brush
04	CwHw – Devil's club – Lady fern	Cw ³² Sx	Bg ^{1,32} Fd ^{1,32} Hw ³² Lw ^{1,32} Pl ¹ Pw ^{1,31,49}	BI	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

1 elevated microsites are preferred

a productive, reliable, and feasible regeneration option

May 2001

31 risk of white pine blister rust

32 limited by growing-season frosts 49 applies only to rust resistant, planted stock

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

p - preferred

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						Stock	cing stan	dards	Regen	Asses	sment	Min. t	ree	% tree
			Conifer species	3	Broadleaf	(we	II-space	d/ha) †	delay	Early	Late	heig	ht	over
	Site series	Primary	Secondary	Tertiary	$\mathbf{species}^{\!\scriptscriptstyle \Delta}$	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01	CwSxw – Falsebox	Fd ^{9,14,32} Lw ^{9,14,32} PI Sx ^{10,13}	BI ^{10,13}	Cw ^{10,13,32} Py ^{9,14}	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
02	Fd – Penstemon – Pinegrass	Fd Pl		BI ^{10,13} Sx ^{10,13} Py ^{9,14}		600	400	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150
03	FdPl – Pinegrass – Twinflower	Fd Lw Pl	Sx ^{10,13}	BI ^{10,13} Cw ^{10,13} Py ^{9,14}	At ^a Ep ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.4 1.0 0.8	150
04	FdPl – Sitka alder – Pinegrass	Fd ³² Lw ³² PI	Sx ^{10,13}	BI ^{10,13} Cw ^{10,13,32} Py ^{9,14}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
05	Sxw – Gooseberry – Sarsaparilla	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Fd Others	2.0 1.4 1.0	150

⁹ restricted to southerly aspects

¹⁰ restricted to northerly aspects

¹⁴ restricted to lower elevations of biogeoclimatic unit32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

¹³ restricted to upper elevations of biogeoclimatic unit

Continued next page

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable p - preferred

ICHmk1 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

	Sita cariac	Site series		Conifer species		Broadleaf		cing stan II-spaced		Regen delay	Asses Early	sment Late	Min. t		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush	
06	Sxw – Oak fern	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Fd Others	2.0 1.4 1.0	150	
07	Sxw – Horsetail	PI ¹ Sx ¹	BI ¹ Fd ^{1,32} Lw ^{1,32}	Cw ³²	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI, Lw Fd Others	1.4 1.0 0.8	150	
08	Sedae – Cinquefoil	non-forested				_	_	_	_	_	_	_	_	_	

1 elevated microsites are preferred

14 restricted to lower elevations of biogeoclimatic unit 32 limited by growing-season frosts a productive, reliable, and feasible regeneration option b limited in productivity, reliability and/or feasibility

_____ May 2001 ____

9 restricted to southerly aspects

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

p – preferred

ICHmw1 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

	Site series	Conifer species Primary Secondary Tertiary			Broadleaf species [△]	(we	ring stan II-spacer MSSpa	d/ha) †	Regen delay (yrs)	Asses Early (yrs)	sment Late (yrs)	Min. t heig (m)	ht	% tree over brush
01	HwCw - Falsebox - Feathermoss	Fd Pl	Cw Pw ^{31,49} Sx	BI Hw Lw ²³	At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02	PI – Juniper – Twinflower	Fd	PI ⁴⁹ Pw ^{31,49}	BI ²⁸ Cw ²⁸ Hw ²⁸ Lw ²³ Sx ²⁸	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
03	HwCw – Falsebox – Pipecleaner moss	Fd Pl	BI ²⁸ Pw ^{31,49} Sx ^{10,13,28}	Cw ²⁸ Hw ²⁸ Lw ²³	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

a productive, reliable, and feasible regeneration option

Continued next page May 2001

¹⁰ restricted to northerly aspects

²⁸ limited by moisture deficit

¹³ restricted to upper elevations of biogeoclimatic unit 23 restricted to trial use

³¹ risk of white pine blister rust

⁴⁹ applies only to rust resistant, planted stock

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

ICHmw1 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

					Stock	ing stan	dards	Regen	Asses	sment	Min. t	ree	% tree
Sita cariac	Drimany	Conifer species	Tortion	Broadleaf				delay	Early	Late			over brush
3116 361163	rilliary	Secondary	Tertialy	sheries	тоора	Моора	Mooh	(yis)	(yis)	(913)	(111)	,	DIUSII
CwFd – Soopolallie – Douglas maple	Fd Pl	Pw ^{31,49}	BI ²⁸ Cw ²⁸ Hw ²⁸ Lw ²³ Pa Sx ²⁸	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
CwHw – Devil's club – Lady fern	Cw ³² Fd ^{1,32} Hw ³² Sx	BI PI Pw ^{1,32,49}		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Fd Others	2.0 1.4 1.0	150
CwHw – Oval-leaved blueberry – Oak fern	BI Cw Fd ^{9,14} Hw Sx	PI Pw ^{31,49}	Lw ^{9,14,23}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
CwHw – Horsetail	Cw ³² Hw ³² Sx	BI PI Fd ^{1,14,32}		Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Fd Others	1.4 1.0 0.8	150
elevated microsites are preferred 28 limited by moisture deficit 28 restricted to southerly aspects 31 risk of white pine blister rust 32 limited by growing-season frosts 33 restricted to trial use 49 applies only to rust resistant, planted													
	Douglas maple CwHw - Devil's club - Lady fern CwHw - Oval-leaved blueberry - Oak fern CwHw - Horsetail	CwFd – Soopolallie – Fd PI Douglas maple CwHw – Devil's club – Cw ³² Lady fern Fd ^{1,32} Hw ³² Sx CwHw – Oval-leaved BI Cw blueberry – Oak fern Fd ^{9,14} Hw Sx CwHw – Horsetail Cw ³² Hw ³² Sx	Site series Primary Secondary CwFd – Soopolallie – Douglas maple CwHw – Devil's club – Lady fern Fd 1,32 Hw32 Sx CwHw – Oval-leaved BI Cw blueberry – Oak fern Fd 9,14 Hw Sx CwHw – Horsetail Cw32 Hw32 Sx CwHw – Horsetail Cw32 Hw32 Sx CwHw – Horsetail Cw32 Hw32 Sx CwHw – Horsetail Cw32 Fd 1,14,32 Elevated microsites are preferred restricted to southerly aspects restricted to lower elevations of biogeoclimatic unit 32 limite	Site series Primary Secondary Tertiary CwFd - Soopolallie - Douglas maple Fd PI Pw ^{31,49} Bl ²⁸ Cw ²⁸ Hw ²⁸ Lw ²³ Pa Sx ²⁸ CwHw - Devil's club - Lady fern Fd ^{1,32} Hw ³² Sx CwHw - Oval-leaved Bl Cw Bl Cw Bl PI Pw ^{1,32,49} Lw ^{9,14,23} CwHw - Oval-leaved Bl Cw Bl Cw Bl Cw Bl PI Pw ^{31,49} Lw ^{9,14,23} CwHw - Horsetail Cw ³² Hw Sx CwHw - Horsetail Cw ³² Bl PI Hw Sx CwHw - Horsetail Cw ³² Bl PI Hw ³² Sx CwHw - Horsetail Cw ³² Bl PI Fd ^{1,14,32} elevated microsites are preferred restricted to southerly aspects restricted to lower elevations of biogeoclimatic unit 32 limited by growing-sic	Site series Primary Secondary Tertiary species^A CwFd – Soopolallie – Douglas maple Fd PI Pw31,49 BI28 Cw28 Hw28 Lw23 Pa Sx28 Ata Epa CwHw – Devii's club – Lady fern Cw32 Fd1,32 Hw32 Sx BI PI Pw1,32,49 Acta Ata Epa CwHw – Oval-leaved blueberry – Oak fern BI Cw Fd9,14 Hw Sx PI Pw31,49 Lw9,14,23 Acta Ata Epa CwHw – Horsetail Cw32 BI PI Hw Sx Acta Atb Epa CwHw – Horsetail Cw32 BI PI Hw32 Sx Acta Atb Epa Epb Fd1,14,32 Epb elevated microsites are preferred restricted to southerly aspects 28 limited by moisture deficit restricted to lower elevations of biogeoclimatic unit 32 limited by growing-season frosts	Site series Formary Scondary Tertiary Broadleaf (weeps) Temporalism (weeps) CWFd – Sooppolallie – Douglas maple Fd Pl Pw³1,49 Bl²8 Cw²8 Hw²8 Lw²3 Pa Sx²8 Atª Ep³ 1200 CWHW – Devil's club – Lady fern CW³2 Fd¹,32 Fd¹,32 Hw³2 Sx Bl Pl Pw³1,49 Lw9,14,23 Actª Atª At² At² At² 1200 CWHW – Oval-leaved blueberry – Oak fern Bl Cw Fd³,14 Hw Sx Pl Pw³1,49 Lw9,14,23 Actª At² At² At² Ep³ 1200 CWHW – Horsetail Cw³2 Fd³,14 Hw Sx Bl Pl Fd³,14 As² Fd³,14,32 Actª At² Ep³ 1000 Elevated microsites are preferred restricted to southerly aspects restricted to lower elevations of biogeoclimatic unit 28 limited by moisture deficit restricted to yerowing-season frosts	Site series Primary Secondary Tertiary Species Species TSSpa MSSpa CwFd – Soopolallie – Douglas maple Fd Pl Pw³1,49 Bl²8 Cw²8 Hw²8 Lw²3 Pa Sx²8 Atª Ep³ 1200 700 CwHw – Devil's club – Lady fern Cw³2 Fd¹,32 Hw³2 Sx Bl Pl Pw¹,32,49 Ep³ Lw9,14,23 Ep³ Act² At² D² 1200 700 CwHw – Oval-leaved blueberry – Oak fern Bl Cw Fd³,14 Hw Sx Pl Pw³1,49 Lw³,14,23 Ep³ Act² At² D² 1200 700 CwHw – Horsetail Cw³2 Hw Sx Bl Pl Fd¹,14,32 Ep³ Act² At² Ep³ 1200 700 elevated microsites are preferred restricted to southerly aspects 28 limited by moisture deficit restricted to lower elevations of biogeoclimatic unit 32 limited by growing-season frosts	Site series Primary Secondary Tertiary species \(^{\text{S}}\) TSSpa MSSpa MSSpa CwFd - Soopolallie - Douglas maple Fd PI Pw31,49 Bl28 Cw28 Hw28 Lw23 Pa Sx28 Ata Epa 1200 700 600 CwHw - Devil's club - Lady fern Cw32 Fd1,32 Hw32 Sx Bl PI Pw1,32,49 Epa Acta Ata Tepa 1200 700 600 CwHw - Oval-leaved blueberry - Oak fern Bl Cw Fd9,14 Hw Sx Pl Pw31,49 Epa Lw9,14,23 Acta Ata Tepa 1200 700 600 CwHw - Horsetail Cw32 Bl Pl Hw Sx Bl Pl Fd1,14,32 Epa Acta Atb Epa 1000 500 400 elevated microsites are preferred restricted to southerly aspects 28 limited by moisture deficit rust restricted to lower elevations of biogeoclimatic unit 32 limited by growing-season frosts a propertical properties b limited by growing-season frosts	Site series Primary Second are preferred restricted to southerly aspects Tertiary Broadleaf species are preferred restricted to southerly aspects Tertiary Broadleaf species are preferred restricted to southerly aspects Rod Pl Pw³1,49 become and productive, restricted to southerly aspects Tertiary appears and productive, restricted to southerly aspects Bl Pl Pw³1,49 become and productive, restricted to lower elevations of biogeoclimatic unit Tertiary appears and productive, restricted to southerly aspects Acta Ata appears and productive, restricted to southerly aspects Acta Ata appears and productive, restricted to lower elevations of biogeoclimatic unit Bl Pl Pw³1,49 become appears and productive, restricted to good productive, restricted to lower elevations of biogeoclimatic unit Broadleaf species Acta Ata appears and productive, restricted to good productive, restricted to good productive, restricted to lower elevations of biogeoclimatic unit Bl Pl Pw³1,49 because and productive, restricted to good productive, restricted to good productive, restricted to good production. Acta Ata appears and productive, restricted to good productive, restricted to good productive, restricted to lower elevations of biogeoclimatic unit Bl Pl Pw³1,49 because and productive, restricted to good productive, restr	Site series Primary Secondary Tertiary Secies Tespa MSSpa MSpa MSp	Site series Primary Secondary Tertiary Separate Species Testa T	Site series Primary Secondary Secon	Site series Primary Secondary Seco

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable **p** – preferred

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	te series - Falsebox -	Primary Fd Lw	Secondary	s Tertiary	Broadleaf species [△]	(we TSSpa	II-spaced		delay	Early	Late	heigl		over
	– Falsebox –	Fd I w					woopa	IM22b	(yrs)	(yrs)	(yrs)	(m)		brush
	rmoss	Tu Lw	Cw PI Sx ^{10,13}	BI ^{10,13} Pw ³¹ Py ^{9,14,23} Hw	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02 Rhaco Clador	mitrium – nia	non-forested				-	-	-	-	-	-	-	-	-
	– Falsebox – 's pine	Fd Lw Pl		BI ^{10,13} CW Pw ³¹ Py ^{9,14,23} Hw Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
04 CwFd -	– Falsebox	Fd Lw Pl	Sx ^{10,13}	BI ^{10,13} Cw Pw ³¹ Py ^{9,14,23} Hw	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

ICHmw2 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

____ May 2001 ____

			Conifer species	onifer species Broadleaf (well-spaced/ha) + delay Early			Broadleaf (well-spaced/			Asses Early	sment Late	Min. t		% tree
	Site series	Primary	Secondary	Tertiary	$\textbf{species}^{\scriptscriptstyle{\Delta}}$	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
05	CwHw – Oak fern – Foamflower	Cw Fd ^{9,14} Hw Lw ^{9,14} Sx	BI PI	Pw ³¹	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
06	CwHw – Devil's club – Lady fern	Cw ³² Sx	BI Fd ^{1,32} Hw ³² Lw ^{1,32} PI	Pw ³¹	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
07	CwHw – Horsetail	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32} PI ¹	Pw ^{1,31}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI, Pw Others	1.4 0.8	150
80	CwSxw – Skunk cabbage	Cw ^{1,32} PI ¹ Sx ¹	BI ¹ Hw ^{1, 32}		Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150
09	Bluejoint – Sedge	non-forested				-	-	-	-	-	-	-	-	-
1	elevated microsites are pref	erred	f white pine bli	ster rust			 a pr	oductive,	reliable,	and feasi	ble regene	eration	option	
	restricted to southerly aspect restricted to lower elevations			d by growing-s	eason frosts			b lir	nited in pr	oductivity	/, reliabili	ty and/or f	easibil	ity

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

ICHmw3 — N	e	Ison
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Sita sarias					Stocking standards af (well-spaced/ha) * TSSpa MSSpa MSSp			Regen delay	Asses Early	sment Late	Min. t heig		% tree over
Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01 HwCw – Falsebox – Feathermoss	Fd	Cw ^{10,13} PI Sx ^{10,13}	BI ^{10,13} Hw ^{10,13} Lw ²³ Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
01-YC HwCw – Feathermoss	Fd	Cw ^{10,13} Hw ^{10,13} PI Sx ^{10,13}	BI ^{10,13} Lw ²³ Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02 Fd – Juniper – Cladina	Fd Pl	Py ^{9,14,23}	Pw ³¹	Epb	1000	500	400	7	12	15	PI, Pw Fd Pv	1.4 1.0 0.8	150

⁹ restricted to southerly aspects

¹⁰ restricted to northerly aspects

¹³ restricted to upper elevations of biogeoclimatic unit

¹⁴ restricted to lower elevations of biogeoclimatic unit

²³ restricted to trial use

³¹ risk of white pine blister rust

a productive, reliable, and feasible regeneration option b limited in productivity, reliability and/or feasibility

Continued next page May 2001

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable p - preferred

ICHmw3 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

		Conifer species series Primary Secondary Tertia				Stocking standards af (well-spaced/ha) * TSSpa MSSpa MSSp			Regen delay	Asses: Early	Late	Min. to	ht	% tree over
	Site series	Primary	Secondary	Tertiary	species△	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush
03	FdPI – Pinegrass – Feathermoss	Fd ³² PI		BI ^{10,13} Cw ^{10,13} Lw ^{23,32} Pw ³¹ Sx ^{10,13}	At ^{53,a} Ep ^{53,a}	1000	500	400	7	12	15	PI, Pw Lw Fd Others	1.4 1.4 1.0 0.8	150
04	CwFd – Soopolallie – Twinflower	Fd Pl	Sx ^{10,13}	Cw ^{10,13} Hw ^{10,13} Lw ²³ Pw ³¹	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
05	CwFd – Falsebox	Fd	Cw ^{10,13} PI Sx ^{10,13}	BI ^{10,13} Hw ^{10,13} Lw ²³ Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

²³ restricted to trial use

¹⁰ restricted to northerly aspects
13 restricted to upper elevations of biogeoclimatic unit

³¹ risk of white pine blister rust32 limited by growing-season frosts 53 minor component

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

p – preferred

ICHmw3 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		<u> </u>							Asses Early	sment Late	Min. t heig		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush		
06	CwHw – Oak fern	Cw Fd ¹⁴ Hw Sx	BI PI	Lw ²³ Pw ³¹	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150		
07	CwHw – Devil's club – Lady fern	Cw ³² Sx	BI Fd ^{1,32} Hw ³² PI	Lw ^{1,23,32} Pw ³¹	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150		
80	CwSxw – Skunk cabbage	Cw ^{1,32} Hw ^{1,32} PI ¹ Sx ¹	BI ¹		Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Other	1.4 0.8	150		
09	Sedge – Sphagnum	non-forested				-	-	-	-	-	-	-	-	-		

May 2001 ____

¹ elevated microsites are preferred

³¹ risk of white pine blister rust

a productive, reliable, and feasible regeneration option b limited in productivity, reliability and/or feasibility

¹⁴ restricted to lower elevations of biogeoclimatic unit

³² limited by growing-season frosts

²³ restricted to trial use

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

p - preferred

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_____ May 2001 ____

			Conifer species		Broadleaf			•		Asses	sment Late	Min. tı heigi		% tree
	Site series	Primary	Secondary	Tertiary	species [△]		MSSpa	<u> </u>	(yrs)	(yrs)	(yrs)	(m)		brush
01	CwHw – Devil's club – Lady fern	Cw ³² Sx	BI Fd ^{1,9,14,32,34} Hw ³²	Pw ³¹	Act ^a At ^{53,a} Ep ^{53,a}	1200	700	600	4	9	15	Pw Fd Others	2.0 1.4 1.0	150
03	HwCw – Falsebox – Feathermoss	Fd ⁹	BI Cw Hw Sx	Lw ^{9,14,23} Pl ^{23,34} Pw ³¹	Act ^b At ^{53,a} Ep ^{53,a}	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
04	CwHw – Oak fern – Spiny wood fern	Cw Fd ^{9,14,34} Hw Sx	BI	Lw ^{9,14,23} Pw ³¹	Act ^a At ^{53,a} Ep ^{53,a}	1200	700	600	4	9	15	Pw, Lw Fd Others	2.0 1.4 1.0	150
05	CwSxw – Devil's club – Horsetail	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32}	Pw ^{1,31}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	Pw Others	1.4 0.8	150
1 9	elevated microsites are pref restricted to southerly aspec restricted to lower elevations	of white pine bli ed by growing-so	eason frosts				,	,		ble regener y and/or fe		•		
	restricted to trial use				Continued next page									

 See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable p – preferred

ICHvk1 —	Nelson	(continued)
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			Broadleaf	Stocking standards (well-spaced/ha) +			Regen Assessment delay Early Late		Min. tree height		% tree over			
	Site series	Primary	Secondary	Tertiary	$\textbf{species}^{\!\scriptscriptstyle \Delta}$	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush
06	CwSxw – Skunk cabbage	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ¹	PJ ^{23,34} PW ^{1,31}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150

May 2001 ____

¹ elevated microsites are preferred

²³ restricted to trial use

³¹ risk of white pine blister rust

³² limited by growing-season frosts

³⁴ risk of snow damage

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

^A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

* TSS – target stocking standards

* MSS – minimum stocking standards

* pa – preferred and acceptable p - preferred

ICHwk1 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

						Stocking standards				sment	Min. t	ree	% tree	
	Site series	Primary	Conifer species Secondary	Tertiary	Broadleaf species [△]		II-spaced MSSpa	<u> </u>	delay (yrs)	Early (yrs)	Late (yrs)	heigi (m)		over brush
01	CwHw – Oak fern	Cw Fd ^{9,14} Hw Sx	BI ^{10,13}	L _W 9,14,23,32 PI ^{23,34} Pw ³¹	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02	Rhacomitrium – Cladonia	non-forested				-	-	-	-	-	-	-	-	-
04	HwCw – Falsebox – Feathermoss	Fd ^{9,14}	Cw Hw Sx ^{10,13}	BI ^{10,13} Lw ^{9,14,23} PI ^{23,34} Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
05	CwHw – Devil's club – Lady fern	Cw ³² Sx	BI Fd ^{1,9,14,32} Hw ³²	Lw ^{1,14,23,32} Pl ^{23,34} Pw ³¹	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
9 10	elevated microsites are pre- restricted to southerly aspec restricted to northerly aspec restricted to upper elevation	ts ts	23 restr 31 risk o	icted to lower eliced to trial of white pine blised by growing-se	ter rust	ogeoclim	atic unit	a pr		eliable, a			easibili	ty next page

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable \mathbf{p} – preferred

ICHwk1 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		ing stan		Regen delay	Asses Early	sment Late	Min. t		% tree
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush
06	CwSxw – Devil's club – Horsetail	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32}	PI ^{1,23,34} Pw ^{1,31}	Act ^a At ^b Ep ^a	1000	500	400	4	9	15	PI, Pw Others	1.4 0.8	150
07	Act – Dogwood – Twinberry	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32}	Pw ^{1,31}	Act ^a At ^a Ep ^a	1000	500	400	4	9	15	Pw Others	1.4 0.8	150
80	CwSxw - Skunk cabbage	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ¹	PI ^{23,34}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150
09	Sedge – Sphagnum	non-forested				_	_	_	_	_	_	_	_	_

¹ elevated microsites are preferred

²³ restricted to trial use

³¹ risk of white pine blister rust

³² limited by growing-season frosts 34 risk of snow damage

a productive, reliable, and feasible regeneration option
 b limited in productivity, reliability and/or feasibility

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable p - preferred

ICHxw — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		Stocking standards (well-spaced/ha) +		Regen delay	Asses Early	sment Late	Min. t heig		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01	CwFd – Mock-orange	Fd Lw PI Py	Bg ^{10,13} Pw ^{31,49}	Cw Hw	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

Refer to the ICHdw for tree species selection and stocking standards, but consider the drier climate of the ICHxw.

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¹⁰ restricted to northerly aspects

¹³ restricted to upper elevations of biogeoclimatic unit

⁴⁹ applies only to rust resistant, planted stock

a productive, reliable, and feasible regeneration option

³¹ risk of white pine blister rust

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

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	_		Conifer species		Broadleaf	(we	ing stan II-space	i/ha) †	Regen delay	Early	sment Late	Min. t heig	ht	% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01 *	FdPI – Pinegrass – Twinflower	Fd ³² Lw ³²	PJ ^{10,13} Py ^{9,14}		At ^a Ep ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.0 0.8 0.6	125
02	Bluebunch wheatgrass – Junegrass	non-forested				-	-	-	-	-	-	-	-	-
03*	FdPy – Bluebunch wheatgrass – Pinegrass	Fd ²⁷ Py		PI		600	400	400	7	12	15	PI Fd Py	1.0 0.8 0.6	125
04*	Fd – Pinegrass – Kinnikinnick	Fd ³² Lw ³² Py	PJ ^{10,13}		At ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.0 0.8 0.6	125

⁹ restricted to southerly aspects

Continued next page
May 2000

¹⁰ restricted to northerly aspects

¹³ restricted to upper elevations of biogeoclimatic unit

¹⁴ restricted to lower elevations of biogeoclimatic unit

²⁷ partial canopy cover required for successful establishment

³² limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

^A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

^{*} TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

[•] This site series may be managed using the Kootenay–Boundary fire maintained ecosystem (NDT4) management guidelines in the Kootenay Boundary Land Use Plan Implementation Strategy, June 1997, Kootenay Inter-agency Management Committee. The decision on which guidelines to use will be determined by management objectives.

IDFdm1 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

							cing stan		Regen		sment	Min. t		% tree
			Conifer species		Broadleaf		II-space	<u> </u>	delay	Early	Late	heig	ht	over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
05	FdLw - Spruce - Pinegrass	Fd ³² Lw ³² PI	Sx ^{10,13}	Py ^{9,14}	At ^a Ep ^{53,a}	1200	700	600	7	12	15	PI, Lw Fd Others	1.4 1.0 0.8	125
06	SxwFd – Dogwood – Gooseberry	Fd ³² Lw ³² Sx	PI		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Fd Others	1.4 1.0 0.8	125
07	Sxw – Horsetail	PI ¹ Sx ¹	Fd ^{1,32} Lw ^{1,32}	BI ¹	Act ^a At ^a Ep ^b	1000	500	400	4	9	15	PI, Lw Fd Others	1.0 0.8 0.6	125

1 elevated microsites are preferred

9 restricted to southerly aspects 10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit 53 minor component

14 restricted to lower elevations of biogeoclimatic unit

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

_____ May 2001 ____

b limited in productivity, reliability and/or feasibility

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

p – preferred

IDFdm2 — No	elson
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May 2000 ____

Continued next page

						Stock	ing stan	dards	Regen	Asses	sment	Min. t	ree	% tree
	Site series	Primary	Conifer species Secondary	Tertiary	Broadleaf species [△]		II-spaced MSSpa	<u>· </u>	delay	Early	Late	heigl		over brush
	3116 261162	Fillialy	Secondary	теппату	sheries	гоора	шоора	Mooh	(yrs)	(yrs)	(yrs)	(m)		DIUSII
01*	FdPI – Pinegrass – Twinflower	Fd ³² Lw ³² Py	PI ^{10,13}		At ^a Ep ^a	1000	500	400	7	12	15	PI, Lw Fd Py	1.0 0.8 0.6	125
02	Antelope-brush – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-	-
03*	Fd – Snowberry – Balsamroot	Fd ²⁷ Py	LW ^{10,13}	PI ^{10,13}	At ^b	600	400	400	7	12	15	PI, Lw Fd Py	1.0 0.8 0.6	125
04◆	FdLw – Spruce – Pinegrass	Fd ³² Lw ³² PI	Sx	Py ^{9,14}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	1.4 1.0 0.8	125
05	SxwAt – Sarsaparilla	PI Sx	Fd ^{1,32} Lw ^{1,32}		Act ^a At ^a Ep ^a	1000	500	400	7	12	15	PI, Lw Fd Sx	1.0 0.8 0.6	125
9 r	elevated microsites are pref estricted to southerly aspec estricted to northerly aspec	ts	14 restri	cted to upper e cted to lower el I canopy requir	evations of bio	geoclimat	ic unit	a pro		eliable, a	nd feasibl	sts e regenera y and/or fe		

A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

* TSS – target stocking standards

* This site series may be managed using the Kootenay–Boundary fire maintained ecosystem (NDT4) management guidelines in the Kootenay Boundary Land Use Plan Implementation Strategy, June 1997, Kootenay Inter-agency Management Committee. The decision on which guidelines to use will be determined by management objectives.

IDFdm2 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

			Conifer species		Broadleaf		ring stan II-spacer		Regen delav	Asses Early	sment Late	Min. t		% tree
	Site series	Primary	Secondary	Tertiary	species ²		MSSpa	<u> </u>	(yrs)	(yrs)	(yrs)	(m)		brush
06	Scrub birch – Horsetail	non-forested				-	_	_	_	-	_	_	-	-
07	Sxw - Horsetail	Sx ¹	Fd ^{1,32} Lw ^{1,32} PI ¹		Act ^a Ep ^a	1000	500	400	4	9	15	PI, Lw Fd Sx	1.0 0.8 0.6	125

___ May 2001 ____

p – preferred

¹ elevated microsites are preferred 32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

IDFxh1	_	Nelson

						Stock	cing stan	dards	Regen		sment	Min. t	ree	% tree
	-		Conifer species	-	Broadleaf		II-space	<u> </u>	delay	Early	Late	heig		over
	Site series	Primary	Secondary	Tertiary	species∆	ISSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01 •	FdPy – Pinegrass	Fd ²⁷ Py		Lw ¹⁰		1000	500	400	7	12	15	Lw Others	0.8 0.6	125
02*	*FdPy – Bluebunch wheatgrass – Balsamroot	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6	125
03*	FdPy – Bluebunch wheatgrass – Pinegrass	Ру	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
04*	FdPy – Snowbrush – Pinegrass	Ру	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
05*	FdPy – Pinegrass – Idaho fescue	Ру	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
06	FdPy – Spirea – Feathermoss	Fd ²⁷ Py	Lw ¹⁰			1000	500	400	7	12	15	Lw Others	0.8 0.6	125
07	FdPy – Snowberry – Spirea	Fd Py	Lw ¹⁰			1000	500	400	7	12	15	Lw Other	0.8 0.6	125
10	avoid logging restricted to northerly aspects partial canopy required for succ	cessful estab	lishment									Cont	tinued	next page

²⁷ partial canopy required for successful establishment

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See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable
 p – preferred

This site series may be managed using the Kootenay–Boundary fire maintained ecosystem (NDT4) management guidelines in the Kootenay Boundary Land Use Plan Implementation Strategy, June 1997, Kootenay Inter-agency Management Committee. The decision on which guidelines to use will be determined by management objectives.

IDFxh1 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

		Conifer species				Broadleaf		(well-spaced/ha) + delay E		Asses Early	sment Late	Min. t heig		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
	SxwFd – Douglas maple – Dogwood	Fd ^{1,32} Py ^{1,32} Sx	PI ¹	Lw ^{1,32}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Other	1.0 0.8	125
09	Willow - Sedge	non-forested				_	_	-	_	_	_	_	_	_

¹ elevated microsites are preferred

³² limited by growing-season frosts

a productive, reliable, and feasible regeneration option

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

This site series may be managed using the Kootenay–Boundary fire maintained ecosystem (NDT4) management guidelines in the Kootenay Boundary Land Use Plan Implementation Strategy, June 1997, Kootenay Inter-agency Management Committee. The decision on which guidelines to use will be determined by management objectives.

MSdk — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

		Conifer species				Broadleaf	(we	ing stan II-spaced	i/ha) †	Regen delay	Early Late		Min. t		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)	1	brush	
01	Sxw – Soopolallie – Grouseberry	Fd ³² Lw ³² PI Sx	ВІ		Act ^b At ^a Ep ^{53,a}	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125	
02	Saskatoon – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-	-	
03	PI – Juniper – Pinegrass	Fd Lw PI		BI Sx	At ^b Ep ^b	1000	500	400	7	12	15	PI, Lw Others	1.0 0.6	125	
04	PI – Oregon-grape – Pinegrass	Fd Lw Pl	BI Sx		At ^a Ep ^b	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125	
05	Sxw – Soopolallie – Snowberry	Fd ³² Lw ³² PI Sx	BI		Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125	
06	Sxw – Dogwood – Horsetail	Sx	BI Fd ^{1,32} Lw ^{1,32} PI ¹		Act ^a At ^a Ep ^b	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125	
07*	Sxw - Scrub birch - Se	dge				-	-	-	-	-	-	-	_	-	

^{*} avoid logging

¹ elevated microsites are preferred 32 limited by growing-season frosts

⁵³ minor component a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

MSdm1 — Nelson

Tree Species Selection and Free Growing Stocking Standard Guidelines

	Sita sarias		Conifer species		Broadleaf				Regen delay	-		Min. t heig		% tree over
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m))	brush
01	Sxw – Falsebox – Feathermoss	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}		At ^a	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125
02	Fd – Penstemon – Pinegrass	Fd Pl	Lw		At ^b	600	400	400	7	12	15	PI, Lw Fd	1.0 0.6	125
03	PI – Grouseberry – Cladonia	PI	Fd ³² Lw ³²	BI ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI, Lw Others	1.0 0.6	125
04	PI – Pinegrass – Kinnikinnick	Fd ^{14,32} Lw ^{14,32} PI		BI ^{10,13} Sx ^{10,13}	At ^b	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125
05	Sxw – Trapper's tea – Grouseberry	PI	BI ^{10,13} Fd ^{9,14,32} Lw ^{9,14,32} Sx		At ^{53,a}	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125

53 minor component

Continued next page May 2001

13 restricted to upper elevations of biogeoclimatic unit

⁹ restricted to southerly aspects

¹⁰ restricted to northerly aspects

¹⁴ restricted to lower elevations of biogeoclimatic unit

³² limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable

p – preferred

MSdm1 — Nelson (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

						Stock	king stan	dards	Regen	Asses	sment	Min. tree		% tree	
			Conifer species		Broadleaf	(we	II-space	d/ha) †	delay	Early	Late	heig	ht	over	
	Site series	Primary	Secondary	Tertiary	species∆	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)		brush	
06	Sxw – Gooseberry	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}		Act ^a At ^a	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125	
07	Sxw – Trapper's tea – Horsetail	PI ¹ Sx ¹	BI ¹			1000	500	400	4	9	15	PI Others	1.0 0.6	125	
80	Sxw – Gooseberry – Oak fern	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	Cw ³²	Act ^a At ^a	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125	
09	Willow - Sedge	non-forested				_	_	_	_	_	_	_	_	_	

¹ elevated microsites are preferred

⁹ restricted to southerly aspects
14 restricted to lower elevations of biogeoclimatic unit

³² limited by growing-season frosts

a productive, reliable, and feasible regeneration option

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards
 MSS – minimum stocking standards
 pa – preferred and acceptable

PPdh1	— Nelson
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					Stock	ing stan	dards	Regen	Asses	sment	Min	. tree	% tree	
	Site series	Primary	Conifer species Secondary	Tertiary	Broadleaf species∆		II-spaced MSSpa	<u> </u>	delay (yrs)	Early (yrs)	Late (yrs)		ight m)	over brush
01*	Py – Bluebunch wheatgrass – Junegrass	Ру	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
02	Selaginella – Bluebunch wheatgrass – Blue-eyed Mary	non-forested				-	-	-	-	-	-	-	-	-
03	Bluebunch wheatgrass – Balsamroot	non-forested				-	-	-	-	-	-	-	-	-
04*	FdPy – Ninebark	Fd Py				600	400	400	7	12	15	All	0.6	125
05*	PyAct – Snowberry – Kentucky bluegrass	Fd ^{1,32} Py ¹ Sx ²³			Act ^a At ^a Ep ^a	600	400	400	7	12	15	All	0.6	125
06	AtAct – Snowberry – Horsetail	not in timber harvesting base			Act ^a At ^a Ep ^a									
	elevated microsites are prefe estricted to trial use	erred		al canopy required by growing-s		ful establi	shment	a pro	oductive, ı	reliable, a	and feasil	ble rege	neration	option

See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines
 TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

This site series may be managed using the Kootenay–Boundary fire maintained ecosystem (NDT4) management guidelines in the Kootenay Boundary Land Use Plan Implementation Strategy, June 1997, Kootenay Inter-agency Management Committee. The decision on which guidelines to use will be determined by management objectives.

Р	Pdh	2	_	N	ρ	nal	n

		Stocking standar Conifer species Broadleaf (well-spaced/h:				Regen delay	Asses Early	sment Late	Min. heig		% tree			
	Site series	Primary	Secondary	Tertiary	species [△]		MSSpa	<u> </u>	(yrs)	(yrs)	(yrs)	(m		brush
01 *	Py – Bluebunch wheatgrass – Junegras	Py s	Fd ^{27,32}	LW ^{10,23,32} PI ²³		600	400	400	7	12	15	All	0.6	125
02a	Bluebunch wheatgrass – Junegrass, x-sx phas	non-forested e				-	-	-	-	-	-	-	-	-
02b	Bluebunch wheatgrass – Junegrass, sm-m pha	non-forested ase				-	-	-	-	-	-	-	-	-
03*	PyAt – Rose – Solomon's-seal	Fd ³² Py ¹ Sx ²⁸		Lw ^{23,32} Pl ²³	Act ^a At ^a Ep ^a	1000	500	400	7	12	15	All	0.6	125
04	Act – Dogwood – Nootka rose	not in timber harvesting base			Act ^a Ep ^a									
	elevated microsites are pre	forred		ıl canopy require	ad for success	iul aetahli	chment	anro	oductive, i	reliable a	nd feasil	ole regene	eration	ontion
10 r	restricted to northerly aspec		28 limite	d by moisture d	eficit	ui ostabii	JiiiiGiit	u pro	, , , , , , , , , , , , , , , , , , , ,	onabio, a	ina roadi.	no rogoni	Jiation	орион

²³ restricted to trial use

May 2000 ____

³² limited by growing-season frosts

A See Interior Broadleaf guidelines on page 80 for stocking standard and free growing guidelines

TSS – target stocking standards

MSS – minimum stocking standards

pa – preferred and acceptable

p – preferred

This site series may be managed using the Kootenay–Boundary fire maintained ecosystem (NDT4) management guidelines in the Kootenay Boundary Land Use Plan Implementation Strategy, June 1997, Kootenay Inter-agency Management Committee. The decision on which guidelines to use will be determined by management objectives.

${\bf Broadleaf - Interior^*}$

Tree Species Selection and Free Growing Stocking Standard Guidelines**

Target from conifer standards		stocking sta		Regen delay	Asses Early	sment_ Late	Min. inter-tree distance	% tree
(stems/ha)	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)	brush
400	600	400	400	4	9	12	2	150
600	1000	500	400	4	9	12	2	150
1000	1200	1000	800	4	9	12	2	150
1200	2000	1200	1000	4	9	12	2	150

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^{*} Cariboo, Kamloops, Nelson, Prince George and Prince Rupert forest regions
** The minimum height for broadleaf trees is based on the minimum height of the tallest conifer for the site series. These standards apply to pure broadleaf stands (black cottonwood, trembling aspen, paper birch, and balsam poplar) for oriented strand board and sawlog production objectives.

[†] TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

Broadleaf — Coast*

Tree Species Selection and Free Growing Stocking Standard Guidelines**

May 2000 ____

			cking standa well-spaced		Regen delay	Asses Early	sment Late	Min. inter-tree distance	% tree
Tree species	Product	TSSpa	MSSpa	MSSp	(yrs)	(yrs)	(yrs)	(m)	brush
Red alder [‡] and bigleaf maple	Sawlogs Pulp	1200 1500	700 1200	600 1000	3	5 5	8 8	2 2	150 150
Coastal black cottonwood (for pulp)	Sawlogs Pulp	700 900	400 600	400 500	3	5 5	8 8	2 2	150 150

^{*} Vancouver Forest Region and the CWH zone of the Prince Rupert Forest Region

** The minimum height for broadleaf trees is based on the minimum height of the tallest conifer for the site series. These standards apply to pure broadleaf stands.

† TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

When growing red alder for sawlog production, it is recommended that stands be thinned to 600 well-spaced trees per hectare, but not before the stands have reached 12 to 16 m in height.

Uneven-aged Stocking Standards* — Single-tree selection only

Target from even-aged standards		Stocking standards (well-spaced/ha)***			Target from even-aged standards		Stocking standards (well-spaced/ha)***		
(stems/ha)	Layer**	TSSpa	MSSpa	MSSp	(stems/ha)	Layer**	TSSpa	MSSpa	MSSp
1200	1	600	300	250	800	1	300	150	150
	2	800	400	300		2	400	200	200
	3	1000	500	400		3	600	300	300
	4	1200	700	600		4	800	400	400
1000	1	400	200	200	600	1	300	150	150
	2	600	300	250		2	400	200	200
	3	800	400	300		3	500	300	300
	4	1000	500	400		4	600	400	400
900	1	400	200	200	400	1	200	100	100
	2	500	300	250		2	300	125	125
	3	700	400	300		3	300	150	150
	4	900	500	400		4	400	200	200

^{*} Maximum regeneration delay is seven years. For a seven-year regeneration delay, the early free growing is 12 years and the late free growing is 15 years. Regeneration delay can be met immediately following harvest if the residual stand has no significant damage or pest problems and meets minimum stocking standards. If regeneration is achieved immediately following harvest, earliest free growing date is five years post harvest and late free growing assessment is at 15 years.

^{**} Layer 1 = mature layer = trees ≥ 12.5 cm dbh; Layer 2 = pole layer = trees 7.5 cm to 12.4 cm dbh;

Layer 3 = sapling layer = trees ≥ 1.3 m in height and up to 7.4 cm dbh; Layer 4 = regeneration layer = trees < 1.3 m in height

^{***} TSS – target stocking standards

MSS – minimum stocking standards

pa - preferred and acceptable

p – preferred