

**Supplementary material**

**Dead and down woody debris fuel loads in Canadian forests**

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**Table S1.** Mean (and standard deviation) of Fine Woody Debris (FWD) fuel load (kg/m<sup>2</sup>) by dominant tree species and ecozone\*. Column 3 is the national FWD average and standard deviation.

Dominant Tree Species	n	FWD	BC	TP	PM	MC	BP	BSW	BSE	MP	AM
<i>Abies balsamea</i>	33	0.15 (0.19)					0.06 (0.04)	0.16 (0.11)	0.29 (0.35)	0.06 (0.00)	0.07 (0.07)
<i>Abies lasiocarpa</i>	29	0.23 (0.19)	0.27 (0.14)		0.10 (0.00)	0.22 (0.21)					
<i>Acer rubrum</i>	14	0.15 (0.16)						0.05 (0.00)	0.10 (0.09)	0.12 (0.03)	0.20 (0.24)
<i>Acer saccharum</i>	21	0.06 (0.03)							0.06 (0.02)	0.06 (0.03)	0.06 (0.03)
<i>Betula alleghaniensis</i>	8	0.08 (0.03)							0.09 (0.01)	0.11 (0.00)	0.07 (0.03)
<i>Betula papyrifera</i>	14	0.21 (0.30)				1.16 (0.00)		0.15 (0.12)	0.15 (0.16)		0.04 (0.00)
<i>Chamaecyparis nootkatensis</i>	5	0.12 (0.06)			0.12 (0.06)						
<i>Larix laricina</i>	18	0.09 (0.11)		0.17 (0.18)			0.04 (0.04)	0.07 (0.05)	0.05 (0.00)	0.09 (0.10)	0.01 (0.00)
<i>Picea engelmannii</i>	11	0.31 (0.28)	0.26 (0.17)			0.32 (0.32)	0.25 (0.00)				
<i>Picea glauca</i>	82	0.13 (0.11)	0.20 (0.07)	0.13 (0.11)		0.12 (0.05)	0.14 (0.14)	0.12 (0.05)	0.14 (0.11)		0.09 (0.04)
<i>Picea mariana</i>	232	0.10 (0.09)	0.64 (0.00)	0.10 (0.08)			0.08 (0.08)	0.10 (0.09)	0.10 (0.09)		0.06 (0.03)
<i>Pinus banksiana</i>	67	0.07 (0.05)		0.07 (0.02)			0.08 (0.07)	0.08 (0.06)	0.06 (0.04)	0.14 (0.00)	
<i>Pinus contorta</i> var. <i>latifolia</i>	11	0.10 (0.07)	0.10 (0.04)			0.15 (0.08)	0.05 (0.02)				
<i>Pinus contorta</i> var. <i>contorta</i>	30	0.22 (0.19)	0.30 (0.00)	0.06 (0.00)		0.23 (0.23)	0.10 (0.04)				
<i>Pinus strobus</i>	8	0.12 (0.04)							0.12 (0.04)	0.12 (0.03)	0.14 (0.00)
<i>Populus balsamifera</i>	15	0.08 (0.08)		0.22 (0.15)			0.07 (0.04)		0.06 (0.00)	0.05 (0.05)	
<i>Populus tremuloides</i>	81	0.13 (0.13)	0.11 (0.00)	0.20 (0.19)		0.41 (0.48)	0.11 (0.06)	0.14 (0.12)	0.08 (0.03)		0.07 (0.02)
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	5	0.44 (0.25)			0.68 (0.19)	0.29 (0.11)					
<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	10	0.34 (0.16)				0.34 (0.16)					
<i>Thuja occidentalis</i>	18	0.10 (0.06)						0.10 (0.04)	0.07 (0.04)	0.12 (0.08)	
<i>Thuja plicata</i>	8	0.29 (0.20)			0.16 (0.16)	0.50 (0.21)					
<i>Tsuga heterophylla</i>	14	0.42 (0.59)			0.44 (0.61)	0.13 (0.00)					
<i>Tsuga mertensiana</i>	4	0.10 (0.06)			0.10 (0.06)						

\* BC (Boreal Cordillera), TP (Taiga Plains), PM (Pacific Maritime), MC (Montane Cordillera), BP (Boreal Plains), BSW (Boreal Shield West), BSE (Boreal Shield East), MP (Mixedwood Plains), and AM (Atlantic Maritime).

**Table S2.** Mean (and standard deviation) of Medium Woody Debris (MWD) fuel load (kg/m<sup>2</sup>) by dominant tree species and ecozone\*. Column 3 is the national MWD average and standard deviation.

Dominant Tree Species	n	MWD	BC	TP	PM	MC	BP	BSW	BSE	MP	AM
<i>Abies balsamea</i>	72	0.51 (0.43)					0.30 (0.09)	0.46 (0.26)	0.84 (1.02)	0.14 (0.00)	0.36 (0.29)
<i>Abies lasiocarpa</i>	29	0.49 (0.26)	0.44 (0.24)		0.62 (0.00)	0.50 (0.28)					
<i>Acer rubrum</i>	16	0.62 (0.48)						0.22 (0.00)	0.60 (0.65)	0.49 (0.23)	0.86 (0.59)
<i>Acer saccharum</i>	22	0.41 (0.21)							0.39 (0.21)	0.45 (0.13)	0.36 (0.30)
<i>Betula alleghaniensis</i>	8	0.40 (0.25)						0.53 (0.32)	0.56 (0.34)	0.51 (0.51)	0.24 (0.24)
<i>Betula papyrifera</i>	31	0.58 (0.33)				1.41 (0.00)		0.31 (0.33)	0.56 (0.28)		0.36 (0.00)
<i>Chamaecyparis nootkatensis</i>	5	0.63 (0.62)			0.63 (0.62)						
<i>Larix laricina</i>	20	0.38 (0.51)		0.35 (0.37)			0.14 (0.14)	0.50 (0.19)	0.26 (0.00)	0.94 (1.29)	1.48 (0.00)
<i>Picea engelmannii</i>	11	0.62 (0.40)	0.48 (0.14)			0.64 (0.47)	0.68 (0.00)	0.34 (0.27)			
<i>Picea glauca</i>	96	0.52 (0.39)	0.36 (0.04)	0.43 (0.36)		0.40 (0.19)	0.69 (0.43)	0.57 (0.53)	0.64 (0.52)		0.30 (0.23)
<i>Picea mariana</i>	389	0.39 (0.28)	0.92 (0.81)	0.35 (0.28)			0.43 (0.32)		0.31 (0.23)		0.24 (0.22)
<i>Pinus banksiana</i>	220	0.51 (0.43)		0.80 (0.65)			0.44 (0.41)		0.37 (0.30)	0.42 (0.00)	
<i>Pinus contorta</i> var. <i>latifolia</i>	11	0.53 (0.30)	0.32 (0.17)	1.14 (0.00)		0.59 (0.28)	0.56 (0.37)				
<i>Pinus contorta</i> var. <i>contorta</i>	31	0.58 (0.28)	1.01 (0.00)			0.57 (0.25)	0.25 (0.15)				
<i>Pinus strobus</i>	12	0.51 (0.27)						0.69 (0.00)	0.57 (0.37)	0.28 (0.03)	0.56 (0.00)
<i>Populus balsamifera</i>	15	0.47 (0.22)		0.64 (0.05)			0.47 (0.22)		0.38 (0.00)	0.35 (0.41)	
<i>Populus tremuloides</i>	111	0.62 (0.38)	0.30 (0.00)	0.70 (0.30)		1.04 (1.05)	0.63 (0.36)	0.36 (0.36)	0.47 (0.35)	0.74 (0.00)	0.24 (0.04)
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	5	1.04 (0.38)			1.34 (0.27)	0.85 (0.32)					
<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	10	0.65 (0.29)				0.65 (0.29)					
<i>Thuja occidentalis</i>	21	0.48 (0.28)						0.49 (0.30)	0.44 (0.15)	0.50 (0.35)	
<i>Thuja plicata</i>	8	0.94 (0.76)			0.80 (0.79)	1.39 (0.61)					
<i>Tsuga heterophylla</i>	14	1.19 (1.18)			1.25 (1.20)	0.38 (0.00)					
<i>Tsuga mertensiana</i>	4	0.34 (0.22)			0.34 (0.22)						

\* BC (Boreal Cordillera), TP (Taiga Plains), PM (Pacific Maritime), MC (Montane Cordillera), BP (Boreal Plains), BSW (Boreal Shield West), BSE (Boreal Shield East), MP (Mixedwood Plains), and AM (Atlantic Maritime).

**Table S3.** Mean (and standard deviation) of Coarse Woody Debris (CWD) fuel load (kg/m<sup>2</sup>) by dominant tree species and ecozone\*. Column 3 is the national CWD average and standard deviation.

Dominant Tree Species	n	CWD	BC	TP	PM	MC	BP	BSW	BSE	MP	AM
<i>Abies balsamea</i>	72	1.53 (1.36)					1.46 (0.39)	1.49 (1.08)	1.81 (1.77)	0.13 (0.00)	0.40 (0.23)
<i>Abies lasiocarpa</i>	36	2.07 (1.86)	1.56 (1.60)		6.41 (0.00)	2.10 (1.79)					
<i>Acer rubrum</i>	16	1.90 (1.57)						4.08 (0.00)	1.55 (1.18)	0.79 (1.24)	2.23 (1.65)
<i>Acer saccharum</i>	22	0.90 (0.93)							0.80 (0.56)	0.52 (0.26)	1.49 (1.44)
<i>Betula alleghaniensis</i>	8	0.96 (0.61)							0.81 (0.40)	2.04 (0.00)	0.80 (0.57)
<i>Betula papyrifera</i>	34	1.37 (1.08)		3.46 (0.00)		0.81 (0.00)		1.15 (0.54)	1.29 (0.71)		0.50 (0.00)
<i>Chamaecyparis nootkatensis</i>	5	5.09 (8.80)			5.09 (8.80)						
<i>Larix laricina</i>											
<i>Picea engelmannii</i>	13	0.26 (0.27)		0.27 (0.20)			0.17 (0.06)	0.16 (0.00)	0.24 (0.00)	0.11 (0.00)	
<i>Picea glauca</i>	15	3.96 (3.74)	2.17 (1.01)			4.52 (3.99)	0.86 (0.00)				
<i>Picea mariana</i>	84	1.27 (1.73)	1.30 (1.78)	0.90 (1.17)		2.98 (2.62)	1.37 (2.32)	1.04 (0.24)	2.26 (2.02)		1.89 (2.53)
<i>Pinus banksiana</i>	321	0.93 (1.12)	1.95 (0.46)	0.60 (0.77)		3.49 (0.00)	0.56 (0.62)	0.70 (1.04)	1.01 (1.41)		0.83 (0.77)
<i>Pinus contorta</i> var. <i>latifolia</i>	210	1.09 (1.13)		0.52 (0.48)			0.56 (1.16)	0.73 (0.79)	1.31 (0.97)	0.06 (0.00)	
<i>Pinus contorta</i> var. <i>contorta</i>	14	3.65 (6.28)	1.13 (1.00)			3.11 (2.13)	8.28 (13.97)				
<i>Pinus strobus</i>	41	2.43 (2.85)	0.49 (0.00)	1.06 (0.00)		2.57 (2.92)	0.40 (0.00)				
<i>Populus balsamifera</i>											
<i>Populus tremuloides</i>	11	0.91 (0.88)						0.90 (0.00)	0.65 (0.25)	0.14 (0.00)	0.19 (0.00)
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	10	0.90 (0.44)		0.88 (0.12)			0.82 (0.32)		1.86 (0.00)	0.41 (0.00)	
<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	106	1.07 (1.41)	0.47 (0.00)	0.61 (0.49)		2.55 (3.07)	1.03 (1.43)	1.01 (1.07)	1.92 (1.32)	0.56 (0.00)	0.60 (0.36)
<i>Thuja occidentalis</i>	8	2.56 (1.49)			2.38 (1.66)	2.85 (1.42)					
<i>Thuja plicata</i>	13	1.87 (1.48)				1.87 (1.48)					
<i>Tsuga heterophylla</i>	19	0.67 (0.50)						0.57 (0.48)	0.91 (0.55)	0.55 (0.47)	
<i>Tsuga mertensiana</i>	10	5.98 (9.17)			6.45 (11.02)	4.89 (3.40)					
	21	9.59 (12.23)			10.32 (12.66)	2.69 (2.01)					
	5	2.19 (3.57)			0.59 (0.34)	8.56 (0.00)					

\* BC (Boreal Cordillera), TP (Taiga Plains), PM (Pacific Maritime), MC (Montane Cordillera), BP (Boreal Plains), BSW (Boreal Shield West), BSE (Boreal Shield East), MP (Mixedwood Plains), and AM (Atlantic Maritime).

**Table S4.** Mean (*and standard deviation*) of Total Dead Woody Debris (TWD) fuel load (kg/m<sup>2</sup>) by species and ecozone\*. Column 3 is the national TWD average and standard deviation.

Dominant Tree Species Code	n	TWD	BC	TP	PM	MC	BP	BSW	BSE	MP	AM
<i>Abies balsamea</i>	72	2.04 (1.50)					1.76 (0.49)	1.95 (1.16)	2.66 (1.96)	0.27 (0.00)	0.76 (0.38)
<i>Abies lasiocarpa</i>	37	2.39 (1.91)	1.78 (1.79)		7.03 (0.00)	2.48 (1.74)					
<i>Acer rubrum</i>	16	2.52 (1.80)						4.30 (0.00)	2.14 (1.25)	1.28 (1.39)	3.09 (2.12)
<i>Acer saccharum</i>	22	1.31 (0.91)							1.19 (0.50)	0.97 (0.32)	1.85 (1.43)
<i>Betula alleghaniensis</i>	8	1.35 (0.77)							1.37 (0.73)	2.55 (0.00)	1.04 (0.63)
<i>Betula papyrifera</i>	35	1.85 (1.26)		3.46 (0.00)		2.22 (0.00)		1.57 (0.84)	1.86 (0.89)		0.87 (0.00)
<i>Chamaecyparis nootkatensis</i>	6	5.61 (9.39)			5.61 (9.39)						
<i>Larix laricina</i>	21	0.52 (0.56)		0.41 (0.48)		4.95 (4.18)	0.26 (0.21)	0.79 (0.53)	0.49 (0.00)	0.99 (1.37)	1.48 (0.00)
<i>Picea engelmannii</i>	15	4.41 (3.89)	2.65 (1.15)			2.70 (2.61)	1.54 (0.00)				
<i>Picea glauca</i>	108	1.45 (1.68)	1.57 (1.61)	1.06 (1.10)		3.49 (0.00)	1.63 (2.07)	1.54 (0.42)	2.89 (2.51)		2.19 (2.72)
<i>Picea mariana</i>	403	1.11 (1.22)	2.87 (0.35)	0.66 (0.69)			0.78 (0.74)	0.89 (1.15)	1.22 (1.49)		0.93 (0.92)
<i>Pinus banksiana</i>	225	1.51 (1.28)		1.32 (1.04)			0.89 (1.27)	1.21 (1.05)	1.64 (0.95)	0.48 (0.00)	
<i>Pinus contorta</i> var. <i>latifolia</i>	16	3.56 (6.19)	1.29 (0.97)			3.44 (2.28)	5.53 (5.53)				
<i>Pinus contorta</i> var. <i>contorta</i>	42	2.80 (2.83)	1.50 (0.00)	2.20 (0.00)		2.98 (2.91)	0.45 (0.43)				
<i>Pinus strobus</i>	12	1.34 (1.05)						1.59 (1.59)	1.22 (1.01)	0.36 (0.13)	0.75 (0.75)
<i>Populus balsamifera</i>	16	1.00 (0.64)		1.52 (0.06)			0.88 (0.55)		2.23 (0.00)	0.56 (0.70)	
<i>Populus tremuloides</i>	120	1.51 (1.43)	0.77 (0.00)	1.14 (0.53)		3.17 (0.00)	1.48 (1.48)	1.55 (1.31)	2.39 (1.35)	1.30 (0.00)	0.84 (0.39)
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	8	3.21 (1.21)			2.92 (1.26)	3.69 (1.17)					
<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	13	2.37 (1.51)				2.37 (1.51)					
<i>Thuja occidentalis</i>	21	1.08 (0.63)						1.06 (0.63)	1.36 (0.58)	0.93 (0.65)	
<i>Thuja plicata</i>	10	6.74 (9.70)			7.13 (11.73)	3.00 (3.00)					
<i>Tsuga heterophylla</i>	21	10.39 (13.18)			11.18 (13.64)	2.88 (1.74)					
<i>Tsuga mertensiana</i>	5	2.46 (3.44)			0.94 (0.56)	8.56 (0.00)					

\* BC (Boreal Cordillera), TP (Taiga Plains), PM (Pacific Maritime), MC (Montane Cordillera), BP (Boreal Plains), BSW (Boreal Shield West), BSE (Boreal Shield East), MP (Mixedwood Plains), and AM (Atlantic Maritime).

**Table S5.** Multiple linear regression results for each DWD size class, including total woody debris by Genus using bioclimatic variables, age and drainage class as potential explanatory variables supplementary to Table 4. Explained variability (Exp Var), plot number (n) and significance (\*  $p < 0.05$ ) are listed. Values in red are significant ( $p < 0.05$ ) with Adjusted  $R^2$  (Adj  $R^2$ )  $> 0.3$ .

Genus	FWD			MWD			CWD			Total DWD		
	Adj $R^2$	Exp Var	n	Adj $R^2$	Exp Var	n	Adj $R^2$	Exp Var	n	Adj $R^2$	Exp Var	n
<i>Abies</i>	0.54*	58.0	63	0.28*	36.3	63	0.18*	28.3	72	0.23	26.4	73
<i>Acer</i>	0.35*	37.1	36	0.12*	14.7	36	0.68*	74.5	36	0.67*	73.8	36
<i>Betula</i>	0.76*	81.9	23	0.09	12.8	23	0.58*	81.0	32	0.34	59.6	33
<i>Larix</i>	0.07	20.6	8	0.08	21.6	8	0.28	39.7	7	0.29	37.8	9
<i>Picea</i>	0.11*	12.2	192	0.14*	15.5	187	0.11*	17.8	152	0.08*	8.5	193
<i>Pinus</i>	0.14*	16.5	78	0.15*	16.3	76	0.14*	14.6	72	0.12*	12.3	79
<i>Populus</i>	0.09	13.9	65	0.04*	5.7	89	0.02	2.3	82	0.00	0.00	92
<i>Pseudotsuga</i>	0.73*	84.7	15	0.49*	64.69	14	0.41*	49.6	15	0.33	52.0	15
<i>Thuja</i>	0.49*	54.5	21	0.46	73.0	21	0.57*	79.3	21	0.55*	76.3	23
<i>Tsuga</i>	0.29	58.5	19	0.77*	84.7	18	0.15	55.7	21	0.13	17.2	21

**Table S6.** Multiple linear regression results for each DWD size class, including total woody debris by Genus using bioclimatic variables, age, drainage class, dbh, live-standing and dead-standing density as potential variables from Database Two, supplementary to Table 5. Explained variability (Exp Var), plot number (n) and significance (\* p<0.05) are listed. Values in red are significant (p<0.05) with Adjusted R<sup>2</sup> (Adj R<sup>2</sup>) >0.3.

Genus	FWD			MWD			CWD			TWD		
	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n
<i>Picea</i>	0.17*	20.8	192	0.19*	20.8	187	0.26*	27.1	152	0.28*	30.3	193
<i>Pinus</i>	0.25*	28.3	78	0.09	12.2	76	0.37*	38.5	72	0.35*	37.0	79
<i>Populus</i>	0.25*	31.0	65	0.13*	17.1	89	0.17*	18.1	82	0.17*	19.3	92

**Table S7.** Multiple linear regression results for each DWD size class, including total woody debris by species using bioclimatic variables, age (when available), drainage class, dbh, live-standing and dead-standing density as potential variables from the NFI and FECD databases, supplementary to Table 6. Explained variability (Exp Var), plot number (n) and significance (\* p<0.05) are listed. Values in red are significant with Adjusted R<sup>2</sup> (Adj R<sup>2</sup>) >0.3.

Dominant Tree Species	FWD			MWD			CWD			TWD		
	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n
<i>Picea engelmannii</i>	0.55*	60.3	10	0.28	36.2	10	0.48*	59.3	10	0.42	55.1	10
<i>Picea glauca</i>	0.11*	17.1	45	0.05	9.7	46	0.47*	39.4	41	0.21*	24.8	46
<i>Picea mariana</i>	0.19*	25.5	136	0.32*	33.0	130	0.18*	19.3	100	0.27*	28.1	136
<i>Pinus banksiana</i>	0.05	12.7	36	0.09	34.3	34	0.16	41.3	31	0.08	28.7	36
<i>Pinus contorta</i> var. <i>latifolia</i>	0.38	48.2	7	0.56*	63.6	7	0.93*	94.0	7	0.95*	96.1	7
<i>Pinus contorta</i> var. <i>contorta</i>	0.11*	14.9	27	0.55*	67.3	27	0.42*	50.8	27	0.37*	46.3	28
<i>Pinus strobus</i>	0.89*	92.5	8	0.52*	59.27	8	0.52*	59.2	7	0.52*	58.8	8
<i>Populus balsamifera</i>	0.64*	76.9	15	0.45*	49.9	15	0.80*	87.4	9	0.23	34.3	15
<i>Populus tremuloides</i>	0.20*	27.2	56	0.16*	21.7	58	0.16*	18.3	53	0.23*	26.4	61

**Table S8.** Multiple linear regression results for each DWD size class, including total woody debris. For *Pinus banksiana*, *Picea glauca*, *Picea mariana*, and *Populus tremuloides* by ecozone using bioclimatic variables, age (when available), drainage class, dbh, live-standing and dead-standing density as potential variables from the NFI and FECD databases, supplementary to Table 7. Explained variability (Exp Var), plot number (n) and significance (\* p<0.05) are listed. Values in red are significant with Adjusted R<sup>2</sup> (Adj R<sup>2</sup>) >0.3.

Ecozone*	FWD			MWD			CWD			TWD		
	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n	Adj R <sup>2</sup>	Exp Var	n
<i>Pinus banksiana</i>												
TP	0.64	87.9	11	0.14	32.8	10	0.53*	63.4	10	0.39	53.0	10
BP	0.41*	49.0	22	0.40*	45.1	34	0.02	12.6	29	0.13	20.9	35
BSW	0.46*	55.2	17	0.44*	47.1	34	0.04	19.2	27	0.27*	31.1	33
BSE	0.27	39.5	7	0.69*	74.4	7	0.45	53.8	7	0.40*	52.2	16
<i>Picea glauca</i>												
TP	0.05	23.5	22	0.10	26.2	23	0.63	70.9	19	0.49	56.0	23
BSW	0.36	46.5	7	0.15	29.5	7			6	0.87	89.1	7
<i>Picea mariana</i>												
TP	0.22*	28.8	25	0.02	14.7	25	0.89*	92.0	13	0.32*	34.5	25
BP	0.62*	69.7	16	0.57*	63.9	16	0.71*	76.0	12	0.64*	69.2	16
BSW	0.23*	26.8	38	0.55*	57.7	36	0.25*	30.4	26	0.41*	47.3	38
BSE	0.15*	16.8	50	0.10	16.4	47	0.16*	20.3	41	0.22*	20.1	50
<i>Populus tremuloides</i>												
BP	0.49*	0.61	32	0.38*	0.44	32	0.28*	0.41	32	0.25*	0.32	33
BSW	0.27	0.36	9	0.61*	0.66	9	0.41	0.49	8	0.52*	0.58	9

\*TP (Taiga Plains), BP (Boreal Plains), BSW (Boreal Shield West), BSE (Boreal Shield East)



**Table S9.** Operational road map for the use of DWD fuel load prediction models. The left side of the table is an interpretation of tree species into CFFDRS (Canadian Forest Fire Danger Rating System) FBP (Fire Behavior Prediction) System Fuel Types, based on methods currently employed by CanFIRE (de Groot 2010). The right side outlines the data/models to estimate DWD fuel loads. For example, if only species and ecozone information is available, then use the data in Tables (T.) S1-S4. If covariates from Database (D-base) 1 (or D-base 2) are available, then use the regression models in Table 4 (or Tables 5-7) and corresponding appendices tables. Where there is a blank, no fuel model/estimate is currently available.

<i>FBP cross-walk</i>				<i>DWD Fuel Load data/models</i>		
Genus	Species	FBP Fuel Type	Criteria/Comment	Species & Ecozone Only	D-base 1	D-base 2
Fir ( <i>Abies</i> )					T. 4	
	<i>Abies balsamea</i>	C-2		T. S1-S4		
	<i>Abies lasiocarpa</i>	C-2		T. S1-S4		
Maple ( <i>Acer</i> )					T. 4	
	<i>Acer rubrum</i>	D-1	spring/fall only	T. S1-S4		
	<i>Acer saccharum</i>	D-1	spring/fall only	T. S1-S4		
Birch ( <i>Betula</i> )					T. 4	
	<i>Betula alleghaniensis</i>	D-1	spring/fall only	T. S1-S4		
	<i>Betula papyrifera</i>	D-1	spring/fall only	T. S1-S4		
	<i>Chamaecyparis nootkatensis</i>			T. S1-S4		
	<i>Larix laricina</i>	D-1	judgement call; could also use O-1 if open stand with grass	T. S1-S4		
Spruce ( <i>Picea</i> )						
	<i>Picea engelmannii</i>	C-2		T. S1-S4		T. 6
	<i>Picea glauca</i>	C-2		T. S1-S4		T. 6 T. 7
	<i>Picea mariana</i>	C-1	if stand density < 2000 stems/ha or 30% stocking, and < 10m height	T. S1-S4		T. 6 T. 7
		C-2	stand >2000 stems/ha or >30% stocking	T. S1-S4		T. 6 T. 7
						T. 5
Pine ( <i>Pinus</i> )						
	<i>Pinus banksiana</i>	C-3	if > 10m height	T. S1-S4		T. 7
		C-4	if < 10m height	T. S1-S4		T. 7
	<i>Pinus contorta</i> var. <i>latifolia</i>	C-3	if > 10m height	T. S1-S4		T. 6
		C-4	if < 10m height	T. S1-S4		T. 6
	<i>Pinus contorta</i> var. <i>contorta</i>	C-3	if > 10m height	T. S1-S4		T. 6
		C-4	if < 10 m height	T. S1-S4		T. 6
<i>Pinus strobus</i>	C-5		T. S1-S4		T. 6	
Poplar ( <i>Populus</i> )						
	<i>Populus balsamifera</i>	D-1 or D-2	spring/fall or summer	T. S1-S4		T. 6
	<i>Populus tremuloides</i>	D-1 or D-2	spring/fall or summer	T. S1-S4		T. 7
Douglas-fir ( <i>Pseudotsuga</i> )					T. 4	
	<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	C-7		T. S1-S4		
	<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	C-7		T. S1-S4		
Cedar ( <i>Thuja</i> )					T. 4	
	<i>Thuja occidentalis</i>	C-2		T. S1-S4		
	<i>Thuja plicata</i>	C-7		T. S1-S4		
Hemlock ( <i>Tsuga</i> )					T. 4	
	<i>Tsuga heterophylla</i>	C-7		T. S1-S4		
	<i>Tsuga mertensiana</i>	C-7		T. S1-S4		

