

Table 18.1. Total above-ground biomass (million tonnes) on forest land by species group, age class and terrestrial ecozone in Canada.

Terrestrial ecozone	Species group	Age (years)											Total	
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+		Other ¹
Taiga Plains	Spruce	2.18	12.18	39.28	79.27	114.17	1 700.65	80.23	61.09	31.16	7.48	4.21	0.00	2 131.89
	Poplar	2.95	13.71	26.21	113.95	196.67	58.79	60.59	27.54	5.21	0.72	0.00	0.00	506.34
	Pine	1.49	9.02	18.16	36.11	16.49	11.78	16.88	10.21	1.16	0.02	0.55	0.00	121.86
	Birch	2.71	7.07	15.63	17.87	10.84	7.00	5.09	1.47	0.32	0.00	0.64	0.00	68.63
	Larch	0.56	1.86	4.17	6.29	6.99	5.49	3.61	1.75	0.26	0.29	0.87	0.00	32.16
	Fir	0.00	0.04	0.37	0.22	0.46	2.06	<0.01	0.00	0.00	0.00	0.00	0.00	3.15
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
	Subtotal	9.89	43.88	103.82	253.71	345.62	1 785.77	166.40	102.05	38.11	8.51	6.27	0.20	2 864.24
Taiga Shield	Spruce	2.16	28.54	97.03	76.68	231.90	346.26	681.96	622.95	1.37	2.35	35.81	0.00	2 126.99
	Pine	6.54	16.52	13.61	11.92	6.08	0.94	0.55	0.01	0.00	0.00	0.00	0.00	56.18
	Poplar	0.86	3.22	3.88	3.45	1.48	37.07	0.12	0.00	0.00	0.00	0.00	0.00	50.08
	Larch	0.61	1.81	4.33	4.52	5.19	2.51	2.60	1.65	0.13	0.13	0.20	0.00	23.68
	Fir	0.01	0.19	1.50	0.11	2.70	0.22	7.88	0.97	0.22	0.00	0.00	0.00	13.81
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.78	11.78
	Birch	2.05	1.72	1.03	0.53	0.47	1.69	0.04	0.00	0.00	0.00	0.00	0.00	7.53
	Other hardwoods	0.00	0.00	0.01	0.06	0.59	1.04	0.01	0.00	0.00	0.00	0.00	0.00	1.70
	Unspecified conifers	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Maple	0.00	0.00	0.00	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<0.01
Subtotal	12.22	52.00	121.38	97.28	248.41	389.73	693.18	625.58	1.72	2.48	36.01	11.78	2 291.76	
Boreal Shield	Spruce	27.54	252.32	595.31	928.40	1 071.32	754.90	735.98	99.11	25.86	3.52	1.66	0.51	4 496.43
	Poplar	34.77	110.71	211.32	316.35	284.74	32.96	9.30	1.33	0.00	1.18	0.39	<0.01	1 003.06
	Pine	43.99	174.87	183.13	230.06	164.94	59.42	37.31	8.63	1.08	0.07	0.00	0.01	903.52
	Birch	12.43	77.53	164.62	196.79	208.90	50.18	10.65	2.49	0.03	0.51	0.00	0.02	724.15
	Fir	14.18	106.89	166.19	121.68	191.11	35.33	37.30	9.81	3.33	0.21	0.78	0.03	686.83
	Maple	1.64	20.84	144.29	182.93	215.06	45.27	8.68	2.45	3.02	0.00	0.00	0.00	624.16
	Unspecified conifers	52.67	64.05	13.20	1.36	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.01	131.77
	Larch	6.43	9.70	18.57	20.81	14.36	11.99	10.47	2.77	0.39	0.13	0.00	0.11	95.72
	Unspecified hardwoods	36.04	16.39	6.17	0.23	5.02	0.07	0.11	0.00	0.00	0.00	0.00	0.00	64.03
	Other hardwoods	0.44	2.24	14.26	19.21	15.45	5.41	1.03	0.70	0.07	0.00	0.00	0.03	58.84
	Cedar & other conifers	0.06	0.91	6.99	9.28	19.25	10.79	5.27	1.85	1.01	0.00	0.00	0.00	55.41
	Unclassified	2.74	2.53	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.03	52.39
	Hemlock	0.00	0.04	1.30	3.35	8.86	1.24	3.50	0.46	0.08	0.00	0.00	0.00	18.84
Subtotal	232.94	839.02	1 525.41	2 030.45	2 199.48	1 007.57	859.59	129.60	34.88	5.62	2.83	47.76	8 915.14	
Atlantic Maritime	Maple	8.04	20.30	84.81	129.01	91.42	29.40	1.26	1.41	0.19	0.00	0.04	<0.01	365.88
	Spruce	8.65	42.43	82.68	115.91	80.76	27.00	5.78	0.46	0.05	0.11	0.00	0.00	363.83
	Fir	9.59	57.19	90.61	115.72	61.07	20.93	0.77	1.07	0.00	0.00	0.00	0.00	356.95
	Birch	4.28	22.51	30.82	37.76	21.12	10.17	0.09	0.00	0.00	0.00	0.00	0.00	126.76
	Poplar	3.37	14.56	29.96	33.39	17.16	3.72	0.00	0.09	0.00	0.00	0.00	0.00	102.26
	Unspecified conifers	16.97	17.17	5.16	3.22	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.02	42.98
	Pine	1.25	6.40	5.30	8.68	7.01	4.99	0.41	0.00	0.00	0.00	0.00	0.00	34.05
	Cedar & other conifers	1.22	2.50	2.51	4.13	8.40	9.77	3.47	0.34	0.00	0.00	0.00	0.00	32.34
	Unspecified hardwoods	5.42	4.17	2.85	2.13	0.33	0.05	0.00	0.00	0.00	0.00	0.00	<0.01	14.95
	Larch	0.46	2.05	4.50	3.32	1.61	0.20	0.03	0.00	0.00	0.00	0.00	0.00	12.18
	Other hardwoods	0.83	6.54	0.55	1.05	0.56	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	9.53
	Unclassified	1.02	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.06	6.33
	Hemlock	<0.01	0.36	0.86	1.45	0.97	0.80	0.04	0.02	0.00	0.00	0.00	0.00	4.50
Subtotal	61.10	196.46	340.62	455.77	290.86	107.03	11.85	3.40	0.23	0.11	0.04	5.08	1 472.55	
Mixedwood Plains	Maple	0.77	3.77	47.39	45.85	39.09	8.88	2.63	0.76	0.21	0.00	0.00	0.00	149.36
	Other hardwoods	0.17	0.97	10.16	20.41	11.66	1.30	0.64	0.00	0.00	0.00	0.00	0.00	45.30
	Poplar	0.22	4.76	15.10	10.35	3.08	1.66	0.08	0.00	0.00	0.00	0.00	0.00	35.25
	Cedar & other conifers	0.10	2.64	10.60	9.71	4.12	0.78	0.33	0.71	0.00	0.00	0.00	0.00	28.98
	Pine	0.54	4.53	7.33	4.86	1.40	0.38	0.34	0.10	0.00	0.00	0.00	0.00	19.49
	Fir	0.08	1.01	8.35	2.34	0.30	0.32	0.20	0.00	0.00	0.00	0.00	0.00	12.59
	Unspecified hardwoods	1.16	1.49	5.10	0.36	1.36	0.16	0.00	0.00	0.00	0.00	0.00	0.00	9.64
	Birch	0.47	2.65	2.79	0.80	0.90	0.17	<0.01	0.00	0.00	0.00	0.00	0.00	7.78
	Spruce	0.21	1.28	2.38	1.89	0.46	0.00	0.03	0.00	0.00	0.00	0.00	0.00	6.25
	Hemlock	0.00	0.00	0.53	1.22	1.93	0.49	0.00	0.00	0.00	0.00	0.00	0.00	4.17
	Larch	0.09	0.46	2.89	0.26	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.98
	Unspecified conifers	1.02	1.04	0.31	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40
	Unclassified	0.29	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	2.29
Subtotal	5.11	25.35	112.94	98.09	64.55	14.15	4.24	1.58	0.21	0.00	0.00	1.27	327.49	
	Poplar	52.13	118.25	213.28	580.49	397.51	229.22	92.59	19.53	2.41	0.14	0.00	0.00	1 705.55
	Spruce	11.21	42.29	140.12	477.00	337.14	263.84	190.47	104.23	37.29	9.34	10.90	0.00	1 623.83

Terrestrial ecozone	Species group	Age (years)											Total	
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+		Other ¹
Boreal Plains	Pine	17.86	53.85	45.98	132.85	89.21	93.89	58.68	18.14	10.75	0.03	0.07	0.03	521.33
	Larch	1.20	4.89	19.69	34.58	29.21	26.29	13.40	3.99	1.40	0.14	0.21	0.00	135.00
	Birch	1.82	10.65	23.27	20.69	6.62	2.69	0.16	0.03	0.00	0.00	0.00	0.00	65.94
	Fir	0.00	1.30	1.67	1.70	1.77	0.46	1.17	0.19	0.71	0.44	0.86	0.00	10.27
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.80	9.80
	Maple	0.03	0.49	1.28	0.58	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41
	Other hardwoods	<0.01	0.12	0.27	0.36	0.00	<0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.77
	Cedar & other conifers	<0.01	<0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Unspecified hardwoods	0.00	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<0.01
Subtotal	84.25	231.84	445.57	1 248.24	861.50	616.39	356.48	146.11	52.56	10.09	12.04	9.82	4 074.91	
Prairies	Poplar	10.36	36.48	12.83	3.56	1.95	0.48	0.00	0.01	0.00	0.00	0.00	0.00	65.67
	Spruce	0.03	0.19	0.39	0.23	0.56	0.51	0.17	0.28	0.00	0.00	0.00	0.00	2.34
	Pine	0.01	0.08	0.88	0.02	0.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00	2.10
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.05	2.05
	Birch	0.09	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
	Maple	0.05	0.06	0.10	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	Douglas-fir	0.00	0.00	0.01	0.04	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Larch	0.00	0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Other hardwoods	<0.01	<0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Fir	0.00	<0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Subtotal	10.53	36.88	14.26	3.88	2.52	2.11	0.17	0.29	0.00	0.00	0.00	2.05	72.68	
Taiga Cordillera	Spruce	0.10	1.46	11.95	18.29	12.41	9.14	396.08	6.99	4.35	0.29	0.00	0.00	461.06
	Fir	0.00	0.02	0.03	2.18	3.17	5.24	5.20	4.91	0.45	0.00	0.00	0.00	21.21
	Birch	0.02	0.17	0.03	0.09	7.53	0.08	0.00	0.00	0.00	0.00	0.00	0.00	7.92
	Pine	0.00	0.04	0.10	0.85	1.82	0.80	0.70	0.00	0.00	0.00	0.00	0.00	4.31
	Poplar	0.07	0.21	0.39	0.36	0.01	0.31	0.03	0.00	0.00	0.00	0.00	0.00	1.37
	Larch	0.00	<0.01	0.03	0.31	0.38	0.05	0.08	0.35	0.07	0.00	0.00	0.00	1.27
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	0.19	1.91	12.53	22.08	25.32	15.63	402.09	12.24	4.86	0.29	0.00	0.00	497.14	
Boreal Cordillera	Spruce	1.22	4.16	23.03	47.66	95.43	238.19	159.39	119.82	89.64	15.53	122.26	0.00	916.33
	Pine	0.41	3.87	33.81	44.17	48.78	89.47	86.06	46.11	24.16	6.74	27.60	0.00	411.19
	Fir	0.01	0.08	1.10	7.61	12.05	26.32	26.52	19.74	17.05	6.46	37.93	0.00	154.88
	Poplar	0.41	2.97	15.39	35.60	22.82	29.63	17.25	9.56	1.07	1.06	3.20	0.00	138.97
	Birch	0.13	0.61	2.02	5.16	2.32	3.71	0.26	0.42	0.05	0.00	0.00	0.00	14.68
	Larch	<0.01	0.01	0.10	0.31	0.39	0.32	0.31	0.10	0.00	0.00	0.00	0.00	1.54
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.67
Subtotal	2.18	11.71	75.44	140.51	181.80	387.64	289.78	195.75	131.97	29.80	190.99	0.67	1 638.24	
Pacific Maritime	Hemlock	6.32	43.78	79.92	72.59	62.62	28.32	31.88	18.06	27.74	12.09	1 075.86	0.00	1 459.18
	Cedar & other conifers	1.06	4.88	10.67	8.26	6.16	6.90	2.27	9.10	11.05	18.14	513.98	0.00	592.48
	Douglas-fir	2.14	14.29	64.77	90.71	44.69	44.01	36.72	13.24	10.30	12.23	84.59	0.00	417.69
	Fir	0.89	8.94	7.70	4.36	1.79	5.32	8.13	8.46	7.81	7.37	295.60	0.00	356.35
	Spruce	0.00	2.85	18.10	0.43	5.79	1.34	1.30	1.17	3.01	2.84	46.12	0.00	82.96
	Other hardwoods	0.29	3.62	20.15	15.84	9.17	4.91	0.96	0.01	0.01	1.08	4.01	0.00	60.05
	Poplar	0.00	0.14	1.17	3.58	7.46	15.81	3.86	3.92	0.29	3.57	4.78	0.00	44.60
	Pine	0.01	1.74	0.10	1.60	3.92	9.79	5.03	5.11	0.23	1.82	5.30	0.00	34.64
	Maple	0.01	0.19	1.94	2.50	5.25	0.01	0.11	0.00	0.00	0.00	0.44	0.00	10.45
	Birch	0.02	0.78	0.28	2.36	2.40	1.84	1.21	0.51	0.00	0.00	0.41	0.00	9.83
Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.41	
Unspecified hardwoods	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Subtotal	10.74	81.21	204.80	202.23	149.24	118.26	91.48	59.59	60.45	59.14	2 031.09	3.41	3 071.65	
Montane Cordillera	Spruce	2.27	12.89	30.40	40.50	77.92	115.72	174.30	188.00	106.44	76.30	405.65	0.00	1 230.39
	Pine	7.77	61.48	36.61	88.63	257.74	219.36	218.01	149.93	64.44	36.01	74.40	0.00	1 214.39
	Fir	0.26	3.91	17.10	21.98	39.06	60.24	80.53	112.09	113.81	92.69	410.98	0.00	952.65
	Douglas-fir	0.58	7.27	17.13	22.54	95.50	135.77	153.38	127.49	38.73	28.57	123.23	0.00	750.19
	Hemlock	0.16	0.85	7.30	8.16	14.93	14.88	14.85	11.43	11.23	11.95	168.89	0.00	264.62
	Poplar	0.22	9.23	16.88	28.44	71.52	48.12	38.38	20.47	1.99	1.68	3.40	0.00	240.32
	Cedar & other conifers	0.04	2.53	5.38	2.66	4.62	4.78	4.70	3.25	2.44	2.85	96.66	0.00	129.91
	Larch	0.19	0.53	1.12	5.00	18.60	15.52	10.82	6.10	3.50	1.87	12.14	0.00	75.38
	Birch	0.41	4.12	11.65	6.71	11.18	8.43	5.01	3.79	0.17	0.23	0.09	0.00	51.79
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.43	11.43
	Other hardwoods	0.00	0.00	<0.01	0.00	0.00	0.00	0.00	0.31	0.00	0.07	0.00	0.00	0.38
Subtotal	11.90	102.81	143.57	224.62	591.06	622.82	699.99	622.87	342.74	252.21	1 295.43	11.43	4 921.45	
	Spruce	0.11	14.56	28.03	30.53	23.87	63.27	88.03	12.17	0.40	<0.01	0.00	0.00	260.96
	Larch	0.08	1.20	2.64	2.21	4.24	2.71	0.92	3.81	0.19	<0.01	0.00	0.00	18.01

Terrestrial ecozone	Species group	Age (years)											Total	
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+		Other ¹
Hudson Plains	Pine	0.51	3.36	1.02	1.92	1.18	0.29	0.00	0.00	0.00	0.00	0.00	0.00	8.28
	Poplar	0.14	0.49	1.27	0.99	1.14	0.46	0.03	0.00	0.00	0.00	0.00	0.00	4.54
	Unclassified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	2.35
	Fir	<0.01	0.44	0.72	0.23	0.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.51
	Birch	0.18	0.25	0.25	0.57	<0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	1.36
	Cedar & other conifers	0.00	0.00	0.02	0.02	0.03	0.02	<0.01	0.03	0.00	0.00	0.00	0.00	0.13
	Unspecified conifers	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
	Other hardwoods	0.00	0.01	0.00	0.00	0.00	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Subtotal	1.02	20.30	34.02	36.47	30.52	66.94	88.98	16.01	0.59	<0.01	0.00	2.35	297.21	
Canada	Spruce	55.68	415.13	1 068.68	1 816.80	2 051.71	3 520.84	2 513.71	1 216.26	299.57	117.77	626.61	0.51	13 703.27
	Poplar	105.51	314.76	547.68	1 130.51	1 005.53	458.24	222.23	82.46	10.97	8.35	11.78	<0.01	3 898.01
	Pine	80.38	335.76	346.02	561.67	598.57	492.24	423.99	238.24	101.82	44.69	107.93	0.03	3 331.33
	Fir	25.01	180.02	295.34	278.13	313.54	156.50	167.70	157.26	143.38	107.16	746.14	0.03	2 570.23
	Hemlock	6.48	45.03	89.92	86.77	89.31	45.74	50.27	29.97	39.05	24.04	1 244.74	0.00	1 751.31
	Douglas-fir	2.72	21.56	81.91	113.30	140.19	179.78	190.09	140.73	49.03	40.80	207.82	0.00	1 167.93
	Maple	10.55	45.65	279.80	360.88	350.85	83.56	12.68	4.62	3.42	0.00	0.48	<0.01	1 152.47
	Birch	24.60	128.12	252.45	289.34	272.29	86.09	22.52	8.70	0.56	0.75	1.14	0.02	1 086.57
	Cedar & other conifers	2.48	13.47	36.19	34.05	42.57	33.04	16.04	15.29	14.51	20.99	610.64	0.00	839.27
	Larch	9.62	22.54	58.05	77.61	81.25	65.08	42.24	20.52	5.93	2.56	13.41	0.11	398.93
	Unspecified conifers	70.66	82.26	18.74	4.60	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.03	177.22
	Other hardwoods	1.73	13.49	45.41	56.93	37.42	12.67	2.66	1.02	0.09	1.15	4.01	0.03	176.59
	Unclassified	4.05	3.53	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.06	102.71
Unspecified hardwoods	42.62	22.06	14.12	2.74	6.71	0.28	0.11	0.00	0.00	0.00	0.00	<0.01	88.63	
Total	442.09	1 643.36	3 134.37	4 813.34	4 990.87	5 134.04	3 664.24	1 915.07	668.33	368.26	3 574.70	95.82	30 444.47	

Source: Canada's National Forest Inventory, combined remeasured (2007-2017) and projected (2006-2017 with NFI projection system) data (Version 2, November 2022) (<http://nfi.nfis.org>)

Note: The Arctic ecozones (Arctic Cordillera, Northern Arctic, Southern Arctic), and the Taiga Plains and Hudson Plains ecozones located in Nunavut, are not inventoried. These non-inventoried areas total 262,189.89 thousand ha.

¹ Missing or unknown age class.