

Table 16.4a. Relative standard errors (%) of total tree volume by species group, age class and managed forest region in Canada.

Managed forests	Species group	Age (years)											
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+	Other ¹
0	Unclassified	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	54.7	98.9	65.1	55.4	94.1	105.5	0.0	0.0	0.0	0.0	0.0	0.0
	Other hardwoods	82.3	25.7	41.7	59.4	61.4	51.3	94.3	125.4	0.0	0.0	101.3	0.0
	Maple	90.3	46.6	38.2	35.2	50.8	99.8	102.0	0.0	0.0	0.0	0.0	0.0
	Birch	57.7	48.6	30.4	45.8	59.8	101.8	101.8	0.0	0.0	0.0	0.0	0.0
	Poplar	64.8	58.2	69.8	34.0	83.6	66.6	96.4	0.0	0.0	0.0	100.3	0.0
	Unspecified conifers	62.5	43.7	68.6	66.0	77.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cedar & other conifers	101.6	125.4	88.7	47.9	79.7	118.4	82.6	60.9	67.3	49.8	19.0	0.0
	Larch	0.0	100.0	48.1	102.0	95.6	125.4	125.4	0.0	0.0	0.0	0.0	0.0
	Douglas-fir	0.0	72.0	0.0	100.8	85.1	54.1	71.4	100.2	99.2	0.0	93.4	0.0
	Hemlock	0.0	73.1	73.5	62.8	53.7	74.0	61.6	0.0	82.6	74.5	26.6	0.0
	Fir	74.1	37.9	38.4	40.9	34.9	102.8	62.2	0.0	0.0	0.0	100.1	0.0
	Pine	102.5	91.8	45.2	73.3	56.3	60.3	0.0	0.0	95.9	0.0	81.5	0.0
	Spruce	79.3	37.0	20.7	17.3	41.8	66.9	27.0	46.8	57.1	76.1	50.1	0.0
11	Unclassified	63.4	35.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	10.1	16.0	40.7	57.9	47.9	100.0	99.6	0.0	0.0	0.0	0.0	0.0
	Other hardwoods	30.4	17.2	23.1	20.0	23.5	29.0	68.1	59.6	100.0	100.0	61.0	0.0
	Maple	27.4	15.2	11.2	12.3	9.8	20.7	44.4	53.2	98.0	0.0	80.4	0.0
	Birch	9.6	6.8	6.6	6.1	6.2	13.2	17.6	32.8	42.8	94.1	63.1	0.0
	Poplar	8.4	5.6	6.5	5.1	5.2	7.7	10.6	17.0	36.3	43.0	44.5	0.0
	Unspecified conifers	8.1	10.0	26.0	54.8	51.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cedar & other conifers	30.9	27.6	29.7	25.8	12.9	15.5	19.6	21.1	25.2	25.4	10.9	0.0
	Larch	19.8	11.4	10.1	8.3	9.8	11.3	13.2	23.9	31.0	46.8	34.0	0.0
	Douglas-fir	31.5	23.3	21.8	31.5	15.9	13.8	13.3	15.9	15.7	20.6	13.3	0.0
	Hemlock	23.9	22.0	18.9	27.1	20.3	19.8	19.6	19.8	18.2	30.0	8.4	0.0
	Fir	12.5	6.3	6.4	7.8	5.8	11.1	9.8	10.7	12.4	13.1	7.8	0.0
	Pine	8.3	5.6	7.0	6.4	6.0	6.8	7.2	9.5	13.3	20.0	17.0	0.0
	Spruce	10.4	4.7	4.4	3.0	3.0	3.9	3.5	5.9	7.9	11.3	8.1	0.0
12	Unclassified	72.6	84.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	33.9	37.3	43.2	98.9	100.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other hardwoods	0.0	46.0	43.1	33.6	58.1	89.2	75.3	100.2	0.0	0.0	0.0	0.0
	Maple	60.6	33.3	24.3	16.1	26.6	50.1	73.9	97.5	99.8	0.0	100.5	0.0
	Birch	42.5	25.9	23.2	21.2	21.1	40.6	47.1	95.1	0.0	0.0	100.5	0.0
	Poplar	17.1	15.2	12.8	11.6	13.6	29.1	37.7	60.7	71.8	99.4	100.2	0.0
	Unspecified conifers	27.0	29.0	37.9	95.6	94.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cedar & other conifers	85.5	90.0	47.6	42.1	58.7	70.2	56.6	0.0	101.0	92.2	41.3	0.0
	Larch	55.8	20.9	22.2	15.4	23.3	25.0	27.8	50.3	52.9	68.1	90.5	0.0
	Douglas-fir	53.1	58.3	50.8	40.0	27.7	26.1	22.7	27.5	48.4	44.4	28.9	0.0
	Hemlock	99.3	69.9	67.7	36.9	66.1	64.3	41.3	65.9	54.4	100.9	43.4	0.0
	Fir	59.7	25.9	17.4	24.1	17.7	31.9	31.6	49.3	38.1	54.4	44.6	0.0
	Pine	20.1	14.3	14.8	14.5	13.6	18.7	25.3	43.9	43.7	56.5	55.4	0.0
	Spruce	22.8	10.9	9.4	8.9	7.8	11.2	9.1	21.6	32.8	35.6	33.0	0.0
	Unclassified	88.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	51.4	99.0	73.8	76.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other hardwoods	71.2	65.6	44.5	64.3	29.4	26.6	69.1	100.0	0.0	0.0	0.0	0.0
	Maple	61.8	65.6	30.3	28.2	69.7	108.4	0.0	0.0	0.0	0.0	0.0	0.0
	Birch	13.8	14.3	19.3	16.9	14.6	43.7	47.2	100.0	0.0	68.1	0.0	0.0
	Poplar	15.6	15.0	13.9	11.7	7.1	9.7	43.0	64.2	0.0	70.9	100.0	0.0
	Unspecified conifers	35.3	30.0	41.5	59.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Managed forests	Species group	Age (years)												
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+	Other ¹	
19	Cedar & other conifers	0.0	100.0	72.9	67.4	66.8	75.8	94.1	100.0	0.0	0.0	0.0	0.0	
	Larch	20.9	11.2	7.9	10.1	14.5	14.7	25.8	25.1	45.5	63.1	60.0	0.0	
	Hemlock	0.0	0.0	0.0	0.0	103.4	103.4	0.0	0.0	0.0	0.0	0.0	0.0	
	Fir	46.2	28.2	23.1	19.7	14.3	20.3	19.5	27.7	50.3	88.3	100.0	0.0	
	Pine	10.1	6.7	8.2	9.0	11.2	15.7	30.3	88.0	71.2	0.0	0.0	0.0	
	Spruce	15.6	5.8	4.5	4.7	4.0	2.8	3.1	4.5	21.4	37.5	19.7	0.0	
	20	Unclassified	76.4	99.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Unspecified hardwoods	34.7	35.6	94.1	0.0	73.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Other hardwoods	55.0	32.7	35.9	45.5	38.1	42.3	100.4	72.5	71.9	99.9	100.0	0.0
		Maple	53.4	31.9	22.7	15.8	27.6	50.7	85.3	80.8	0.0	0.0	0.0	0.0
		Birch	34.4	18.7	17.6	15.5	16.0	39.3	65.8	59.7	99.9	0.0	0.0	0.0
		Poplar	20.5	16.1	12.3	11.1	12.1	20.2	28.4	31.7	71.3	85.0	44.1	0.0
		Unspecified conifers	33.7	31.7	64.1	67.5	100.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Cedar & other conifers	73.4	51.0	61.0	54.7	46.9	34.4	51.4	84.5	56.0	42.7	17.6	0.0
		Larch	47.3	17.9	16.5	22.5	32.0	33.9	24.3	40.5	71.0	100.0	89.9	0.0
Douglas-fir		0.0	100.1	54.2	68.2	48.2	39.8	36.0	31.5	60.3	76.2	58.7	0.0	
Hemlock		100.2	61.8	48.3	58.2	33.5	46.7	33.0	61.6	46.5	54.5	15.3	0.0	
Fir		60.6	15.6	15.6	14.9	13.8	22.1	18.2	25.0	23.7	27.7	16.7	0.0	
Pine		23.3	16.0	12.2	13.2	16.3	19.0	19.9	23.6	44.7	46.7	27.5	0.0	
Spruce		29.5	13.9	9.3	7.7	6.7	8.0	7.9	13.7	22.6	23.5	13.7	0.0	
31		Unclassified	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	0.0	0.0	94.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Other hardwoods	0.0	55.2	67.4	61.8	96.2	54.3	0.0	0.0	0.0	0.0	0.0	0.0	
	Maple	86.9	46.0	64.9	52.2	80.7	117.4	0.0	0.0	0.0	0.0	0.0	0.0	
	Birch	83.3	52.2	85.7	87.6	0.0	136.1	0.0	0.0	0.0	0.0	0.0	0.0	
	Poplar	63.3	30.8	56.7	49.9	44.7	43.5	84.5	0.0	0.0	0.0	0.0	0.0	
	Unspecified conifers	0.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Larch	77.7	62.4	37.7	43.1	41.0	33.2	40.2	50.5	99.6	0.0	99.6	0.0	
	Douglas-fir	0.0	67.8	67.8	54.6	87.5	97.6	60.3	50.1	83.2	67.8	37.6	0.0	
	Fir	0.0	82.0	93.6	58.2	69.0	0.0	54.2	0.0	0.0	0.0	0.0	0.0	
	Pine	70.5	29.1	41.1	34.3	39.7	45.4	70.0	99.6	0.0	0.0	121.5	0.0	
	Spruce	62.7	25.5	37.7	26.6	24.4	29.0	39.2	33.4	72.7	99.6	0.0	0.0	
32	Unclassified	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Unspecified hardwoods	28.9	41.0	83.3	83.3	87.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Other hardwoods	0.0	57.3	46.6	59.0	74.9	89.0	101.3	0.0	0.0	0.0	0.0	0.0	
	Maple	77.4	82.2	32.2	44.8	65.7	97.5	97.7	0.0	0.0	0.0	0.0	0.0	
	Birch	42.5	47.4	36.7	46.4	52.9	62.8	99.2	0.0	0.0	0.0	0.0	0.0	
	Poplar	34.4	17.5	21.1	31.1	28.9	52.4	60.9	96.7	0.0	97.9	0.0	0.0	
	Unspecified conifers	113.3	81.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Cedar & other conifers	97.2	65.0	57.2	63.0	93.1	83.2	0.0	0.0	0.0	0.0	64.3	0.0	
	Larch	97.2	61.0	61.7	57.8	80.1	67.6	76.2	0.0	0.0	99.1	0.0	0.0	
	Douglas-fir	65.6	55.8	65.4	97.5	56.3	45.1	72.8	58.9	53.2	84.4	37.4	0.0	
	Hemlock	0.0	97.9	96.1	101.4	89.4	77.7	101.3	0.0	69.7	97.9	70.1	0.0	
	Fir	94.5	43.2	63.8	75.5	39.3	99.7	99.7	102.9	0.0	0.0	99.7	0.0	
	Pine	51.7	36.3	38.1	31.6	15.8	52.1	61.4	94.7	94.5	0.0	99.7	0.0	
Spruce	49.4	44.6	28.4	33.3	28.3	31.7	40.9	93.6	97.9	83.6	88.3	0.0		
	Unclassified	0.0	100.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Unspecified hardwoods	88.6	83.4	91.6	105.1	0.0	93.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Other hardwoods	78.8	87.5	51.1	74.0	90.2	97.9	97.6	0.0	99.9	0.0	0.0	0.0	
	Maple	53.2	37.1	32.3	36.3	38.4	34.6	105.8	110.2	0.0	0.0	0.0	0.0	
	Birch	37.0	28.3	24.2	35.4	32.8	57.3	54.2	59.1	99.9	0.0	0.0	0.0	

Managed forests	Species group	Age (years)											
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+	Other ¹
33	Poplar	21.2	19.3	20.3	21.2	21.5	29.3	46.5	53.4	52.2	100.3	98.0	0.0
	Unspecified conifers	45.0	50.0	74.9	82.0	77.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cedar & other conifers	72.6	44.2	53.9	68.9	75.1	78.9	54.4	83.9	100.2	100.1	25.4	0.0
	Larch	41.9	31.1	20.8	24.1	24.8	28.0	46.1	50.2	99.9	83.6	56.1	0.0
	Douglas-fir	63.1	56.7	64.7	77.7	46.1	45.9	36.4	41.2	58.5	70.1	48.7	0.0
	Hemlock	88.6	53.0	50.2	48.1	54.1	73.7	51.7	56.9	51.9	61.8	28.1	0.0
	Fir	52.0	28.9	27.3	35.3	21.3	27.4	23.8	30.8	25.9	26.2	18.2	0.0
	Pine	25.4	20.7	23.1	19.7	19.7	24.5	26.5	26.3	34.5	52.8	38.3	0.0
	Spruce	31.1	20.2	16.6	14.3	12.6	15.3	12.0	21.1	22.6	25.1	15.0	0.0
40	Unclassified	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	103.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other hardwoods	0.0	0.0	0.0	66.9	0.0	64.2	0.0	0.0	0.0	0.0	0.0	0.0
	Birch	42.9	39.4	49.2	42.6	55.8	0.0	103.6	99.0	0.0	0.0	0.0	0.0
	Poplar	39.3	60.3	30.9	39.9	24.0	18.5	101.7	82.5	99.0	0.0	0.0	0.0
	Cedar & other conifers	0.0	99.0	0.0	0.0	113.0	113.0	0.0	113.0	0.0	113.0	88.1	0.0
	Larch	52.1	43.6	49.7	42.9	55.1	51.8	61.1	92.7	0.0	0.0	99.9	0.0
	Hemlock	93.9	99.0	92.1	0.0	90.9	0.0	64.5	95.7	99.0	99.0	38.8	0.0
	Fir	100.9	58.1	60.8	62.1	66.2	100.3	83.8	98.9	0.0	0.0	68.8	0.0
	Pine	48.7	27.2	36.3	42.5	40.9	78.8	57.9	99.6	0.0	0.0	99.0	0.0
	Spruce	36.6	21.6	19.5	19.2	21.0	8.5	13.3	25.2	68.7	73.8	57.2	0.0
	50	Unclassified	32.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unspecified hardwoods		11.6	17.3	19.2	54.8	29.1	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Other hardwoods		25.5	24.1	12.6	13.8	16.3	41.0	60.2	100.1	0.0	100.4	82.7	0.0
Maple		14.1	9.3	6.4	6.5	7.2	13.6	37.0	41.7	71.8	0.0	0.0	0.0
Birch		15.9	10.0	9.0	13.1	14.2	22.1	45.7	91.5	0.0	0.0	0.0	0.0
Poplar		7.8	6.4	5.9	6.5	11.4	20.5	27.8	37.9	78.3	73.8	91.4	0.0
Unspecified conifers		11.6	11.3	21.2	47.3	39.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cedar & other conifers		46.8	21.2	13.7	11.7	12.9	26.8	29.2	45.1	66.7	72.6	46.3	0.0
Larch		32.4	18.2	18.6	16.4	23.5	33.9	47.9	62.2	79.6	0.0	58.5	0.0
Douglas-fir		44.0	53.4	43.9	30.9	27.8	28.2	37.4	28.1	45.3	48.1	38.6	0.0
Hemlock		71.9	41.1	25.7	34.8	41.8	40.9	33.5	78.1	49.7	72.0	33.8	0.0
Fir		15.2	9.0	6.1	9.0	13.7	25.5	57.8	57.4	0.0	98.2	65.4	0.0
Pine	35.9	15.0	12.2	15.3	13.6	20.3	21.7	38.3	77.1	76.7	51.6	0.0	
Spruce	15.3	9.8	6.2	5.2	8.4	14.8	16.8	31.1	33.5	59.4	46.3	0.0	
100	Unclassified	96.9	72.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unspecified hardwoods	35.5	47.2	80.6	53.2	47.9	98.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other hardwoods	53.8	42.3	49.1	31.2	33.0	73.2	95.5	0.0	100.6	0.0	100.3	0.0
	Maple	57.0	50.1	22.4	22.3	21.0	49.0	64.5	0.0	100.2	0.0	0.0	0.0
	Birch	25.2	20.8	18.4	14.6	16.0	29.2	50.3	66.1	0.0	0.0	0.0	0.0
	Poplar	26.1	14.6	15.6	17.1	15.5	33.8	35.6	33.0	83.2	47.6	78.7	0.0
	Unspecified conifers	28.3	34.0	44.2	0.0	100.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cedar & other conifers	0.0	70.9	44.5	31.4	31.7	41.0	62.8	62.1	89.3	0.0	31.2	0.0
	Larch	60.0	35.5	22.5	26.5	33.9	35.1	48.7	67.1	89.6	100.2	17.2	0.0
	Douglas-fir	0.0	71.5	50.5	37.4	86.4	77.6	33.7	39.3	78.6	66.6	33.7	0.0
	Hemlock	0.0	56.0	39.3	38.1	41.3	75.3	73.2	67.8	54.3	52.8	29.1	0.0
	Fir	40.8	23.9	18.2	19.6	24.8	26.8	37.3	56.6	42.5	60.9	82.9	0.0
	Pine	27.6	14.2	15.8	15.5	21.5	26.4	38.6	43.7	51.1	50.5	40.3	0.0
	Spruce	40.8	14.3	9.7	11.1	8.5	9.2	8.1	13.5	39.3	75.7	40.1	0.0
	Unclassified	37.7	22.2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unspecified hardwoods	7.9	11.2	17.3	46.3	23.2	52.4	99.6	0.0	0.0	0.0	0.0	0.0	
Other hardwoods	19.0	13.9	11.3	10.5	12.2	19.3	33.8	44.5	73.7	71.0	54.6	0.0	

Managed forests	Species group	Age (years)											Other ¹
		1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-180	181-200	201+	
Canada	Maple	13.3	7.7	5.2	5.2	5.9	11.1	26.6	30.4	77.9	0.0	77.0	0.0
	Birch	6.7	5.0	5.0	4.7	5.0	10.4	15.0	27.6	38.7	55.3	61.5	0.0
	Poplar	5.4	3.8	3.9	3.5	3.5	5.9	9.3	14.7	31.6	31.7	31.3	0.0
	Unspecified conifers	6.7	7.2	16.9	29.2	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cedar & other conifers	28.6	16.1	15.2	12.4	9.5	12.3	14.9	27.9	24.7	21.5	8.4	0.0
	Larch	16.1	6.3	5.6	5.3	7.2	8.3	9.8	14.6	22.7	34.1	27.0	0.0
	Douglas-fir	25.9	23.4	19.6	19.7	12.5	10.7	11.3	12.4	13.3	16.7	13.3	0.0
	Hemlock	23.0	17.1	15.4	19.9	16.5	16.1	14.5	20.3	15.5	23.8	6.8	0.0
	Fir	9.8	4.8	4.2	5.3	4.4	8.0	7.2	9.0	9.9	10.5	6.6	0.0
	Pine	5.8	3.8	4.4	4.5	4.6	5.5	6.2	8.6	13.7	17.3	13.2	0.0
Spruce	7.0	3.5	2.6	2.2	2.1	2.1	2.1	3.4	6.7	9.2	6.0	0.0	

Source: Canada's National Forest Inventory, combined re-measured (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.

¹Missing or unknown age class.

Managed forest

Code	Description
0	Not available
11	Long term volume or area based Crown timber dispositions
12	Short term volume or area based Crown timber dispositions
13	No current Crown timber dispositions
20	Legal protection status (IUCN class IA, IB, II, III, IV, V, VI equivalent)
31	Reserved by the Federal government for military or other purposes
32	Reserved by the Federal government under the Indian Act
33	Reserved or designated restricted use by provincial or territorial government
40	Aboriginal lands
50	Privately-owned lands
100	Water