

FOREST RESEARCH REPORT



Nova Scotia Department of Natural Resources
Forest Management Planning

Volume Tables and Species/Product Correction Factors for Standing Softwoods and Hardwoods in Nova Scotia

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INTRODUCTION

Volume tables have been provided in Nova Scotia's Forestry Field Handbook since the first edition in 1983. Earlier editions included tables that allowed estimation of merchantable volume based on average height and basal area measurements. In the latest edition (NSDNR 1993), these tables were refined so that volume adjustments could be made according to variation in average tree diameter. This made it necessary to estimate average diameter in addition to average height and basal area before making volume estimates. Some handbook users have requested a return to the simpler format, whereby diameter data are not required for volume estimates. It is the purpose of this report to provide these simpler tables for those cases when accuracy requirements can be relaxed. In addition, more detailed tables (which are consistent with the simpler tables) are also included for cases where more accuracy is desired. A description of the basis for volume table calculation; and how volume estimates may vary by species, harvesting system, and tree size are also provided.

METHODS

Volume estimates provided in this document are based on Honer's standard volume tables (Honer et al. 1983). Honer provides tree volume functions based on total height and diameter at breast height (dbh) for major tree species in eastern Canada. They have been tested for their applicability to Nova Scotia by comparison with stem analyses (NSDNR 1996a).

For this report, tree-level values for merchantable tree-length, merchantable shortwood (2.44 m), and sawlog volumes were calculated for several species and diameter-height combinations. These tree-level volumes were then used to generate stand-level volumes in two steps:

- (i) volume-to-basal area ratios were calculated for trees in all diameter-height combinations;
- (ii) appropriate ratios were multiplied by stand basal area values to give stand-level volumes.

Appropriate volume-to-basal area ratios are those associated with the tree of average basal area (see Appendix 1 for details). The height of a tree of average basal area is approximated by what is called Lorey's height. The diameter of a tree of average basal area is known as the quadratic mean diameter (qdbh), and can be calculated directly from diameter measurements (Husch et al. 1982). To eliminate the need for measuring diameters in the field, assumptions can be made regarding average diameter achieved for a stand of given average height. Data from provincial inventory plots were used to establish these diameter/height relationships for different product classes and species in Nova Scotia (see Appendices 2 and 3 for details).

For this report, generic Softwood and Hardwood Volume Tables (merchantable and sawlog) were produced using volumes calculated for white pine and maple (red and sugar combined). These species represent average tree taper conditions for each group. To allow for more accurate volume estimates when data are available; diameter class, species, and shortwood correction factors were also produced for use with these Tables. In previous Handbook editions, sawlog volumes were listed in Bd.ft./ha. This has been changed to m³/ha for overall consistency, and to allow estimation of merchantable top-wood volume above sawlog sections.

HOW TO USE THESE TABLES

Merchantable volumes, sawlog volumes, and correction factors produced for softwoods and hardwoods are shown in Tables 1-14. Sampling procedures and use of these Tables depend on whether diameter measurements are, or are not, being taken. General procedures and some examples are outlined below.

Diameters Are Not Measured

Conduct a prism sweep and count the number of trees in each product class (merchantable and sawlog). Tree counts multiplied by the prism basal area factor (BAF) give plot values for stand basal area (m²/ha) in each class. To obtain estimates of Lorey's height, visually determine a co-dominant tree representative in height for each product class, then measure these heights. Heights and basal area counts are then averaged over all plots in the same stand to obtain per hectare values for look-up

in Tables 1, 3, 8, or 10. Estimated gross volumes are read directly off the appropriate Tables. Species and/or shortwood correction factors can then be applied to these values (Tables 5-7 and 12-14). After volume estimates have been determined, reductions should be made for cull and waste.

Diameters Are Measured

Conduct a prism sweep and count the number of trees in each product class (merchantable and sawlog). Tree counts multiplied by the prism basal area factor (BAF) give plot values for stand basal area (m^2/ha) in each class. Measure the diameter of each tree tallied for later use in calculating qdbh by product class (see Appendix 1 for details). To obtain estimates of Lorey's height, visually determine a co-dominate tree representative in height for each product class, then measure these heights. Heights and basal area counts are then averaged over all plots in the same stand to obtain per hectare values for look-up in Tables 1, 3, 8, or 10. Correct volume estimates for diameter using Tables 2, 4, 9, or 11. If correction factors for species and shortwood (as well as diameter) are required, these can be found in Appendix 5. After volume estimates have been determined, reductions should be made for cull and waste.

Notes

- When using Tables 1, 3, 8 and 10 without dbh measurement correction, product size classes are limited to the merchantable and sawlog size classes described in Appendix 2. This is because the volumes listed are based on specific diameter versus height relationships found in these size classes. If diameter measurements are taken for volume correction, product classes are no longer limited by specified diameters. A cruise may change the limits of acceptability for a particular product (for example: decrease minimum sawlog dbh from 14.1 to 13.1 cm for softwoods), or include other products of interest with different dbh requirements (for example: studwood). In all cases, however, volume estimates are limited by top diameter and stump height values listed in Appendix 2.
- The number of tree heights to measure in each plot and/or product class must be assessed on a site by site basis. In uniform stands where several plots are being assessed, it may only be necessary to take heights in every second plot. In non-uniform stands or small stands where only a few plots are established, heights may need to be taken at every plot to get a representative measure.
- Listed shortwood correction factors are intended to illustrate potential losses due to shortwood versus tree-length harvesting. They are based on an assumed average loss of 1.22 m (4ft.) from the merchantable length of the tree, and on no utilization of short pieces. These assumptions may, or may not, be representative of individual harvesting operations.
- Sawlog volume estimates do not include merchantable top-wood. Merchantable top-wood volumes may be significant for hardwoods where sawlog top diameter limits are set at 20.32 cm (8 inches). To estimate top-wood volume, determine diameter class corrected sawlog and merchantable volumes, then subtract sawlog volume estimates (m^3/ha) from merchantable volume estimates (m^3/ha). Volumes must be diameter class corrected so derived merchantable and sawlog volume estimates are based on the same average diameter and height. Top-wood estimates are maximum estimates not discounted for short pieces.
- In using the per hectare volume estimates contained in this report, it is important to have an accurate measure of stand area to estimate overall volumes. This may mean verifying air photo scale and stand boundaries before determining stand areas.
- Factors to convert final volume estimates from m^3/ha to other units are given in Appendix 4.

Examples

1. Example 1 is a softwood stand of mixed species, with no species dominant in any class. No diameter measurements were taken. The stand will be harvested using a tree-length system.

| Stand | Plot # | Merch. Trees/Plot | Sawlog Trees/Plot | Merch. Lorey's Ht. (m) | Sawlog Lorey's Ht. (m) | Merch. QDBH (cm) | Sawlog QDBH (cm) |
|----------------|------------------------------|----------------------|----------------------|------------------------------|------------------------------|------------------------|------------------------|
| 1 | 1 | 16 | 0 | 12.5 | | | |
| | 2 | 12 | 6 | 11.0 | 16.0 | | |
| | 3 | 15 | 2 | 11.4 | 16.6 | | |
| | 4 | 17 | 5 | 10.6 | 17.2 | | |
| | Mean | 15.00 | 3.25 | 11.4 | 16.6 | nd | nd |
| BAF = 2 | BA (m²/ha) | 30.00 | 6.50 | | | | |

(1A) Determine Merchantable Volume:

From Table 1, look up volume for MBA = 30 m²/ha and Lorey's Ht. = 11 m.

Volume = 136 m³/ha

Adjust estimate for expected cull and waste (for example: 5%).

Volume = (136 m³/ha) x (0.95) = 129 m³/ha

(1B) Determine Sawlog Volume:

From Table 3, look up volume for SBA = 6 m²/ha and Lorey's Ht. = 17 m.

Volume = 42 m³/ha

Adjust estimate for expected cull and waste (for example: 5%).

Volume = (42 m³/ha) x (0.95) = 40 m³/ha

2. Example 2 is the same as Example 1 except: (i) the merchantable size class is dominated by balsam fir and will be harvested using a shortwood system; and (ii) the sawlog size class is dominated by red spruce.

| Stand | Plot # | Merch. Trees/Plot | Sawlog Trees/Plot | Merch. Lorey's Ht. (m) | Sawlog Lorey's Ht. (m) | Merch. QDBH (cm) | Sawlog QDBH (cm) |
|----------------|------------------------------|----------------------|----------------------|------------------------------|------------------------------|------------------------|------------------------|
| 1 | 1 | 16 | 0 | 12.5 | | | |
| | 2 | 12 | 6 | 11.0 | 16.0 | | |
| | 3 | 15 | 2 | 11.4 | 16.6 | | |
| | 4 | 17 | 5 | 10.6 | 17.2 | | |
| | Mean | 15.00 | 3.25 | 11.4 | 16.6 | nd | nd |
| BAF = 2 | BA (m²/ha) | 30.00 | 6.50 | | | | |

(2A) Determine Shortwood Merchantable Volume:

From Table 1, look up volume for MBA = 30 m²/ha and Lorey's Ht. = 11 m.

Volume = 136 m³/ha

From Table 6, look up correction factor for shortwood balsam fir at Lorey's Ht. = 11 m.

Correction Factor = 0.94

Apply correction factor to estimate Merchantable Balsam Fir Shortwood Volume.

(136 m³/ha) x (0.94) = 128 m³/ha

Adjust estimate for expected cull and waste (for example: 10%).

Volume = (128 m³/ha) x (0.90) = 115 m³/ha

(2B) Determine Sawlog Volume:

From Table 3, look up volume for SBA = 6 m²/ha and Lorey's Ht. = 17 m.

Volume = 42 m³/ha

From Table 7, look up correction factor for sawlog red spruce at Lorey's Ht. = 17 m.

Correction Factor = 1.06

Apply correction factor to estimate Red Spruce Sawlog Volume.

(42 m³/ha) x (1.06) = 45 m³/ha

Adjust estimate for expected cull and waste (for example: 5%).

Volume = (45 m³/ha) x (0.95) = 43 m³/ha

3. Example 3 is the same as Example 2 except diameter measurements were taken for more accuracy.

| Stand | Plot # | Merch. Trees/Plot | Sawlog Trees/Plot | Merch. Lorey's Ht. (m) | Sawlog Lorey's Ht. (m) | Merch. QDBH (cm) | Sawlog QDBH (cm) |
|----------------|------------------------------|----------------------|----------------------|------------------------------|------------------------------|------------------------|------------------------|
| 1 | 1 | 16 | 0 | 12.5 | | | |
| | 2 | 12 | 6 | 11.0 | 16.0 | | |
| | 3 | 15 | 2 | 11.4 | 16.6 | | |
| | 4 | 17 | 5 | 10.6 | 17.2 | | |
| Mean | | 15.00 | 3.25 | 11.4 | 16.6 | 11.8 | 22.6 |
| BAF = 2 | BA (m²/ha) | 30.00 | 6.50 | | | | |

(3A) Determine Shortwood Merchantable Volume:

From Table 1, look up volume for MBA = 30 m²/ha and Lorey's Ht. = 11 m.

Volume = 136 m³/ha

From Table A5-5 (Appendix 5), look up correction factor for shortwood balsam fir at Lorey's Ht. = 11 m and QDBH = 12 cm.

Correction Factor = 0.77

Apply correction factor to estimate Merchantable Balsam Fir Shortwood Volume.

(136 m³/ha) x (0.77) = 105 m³/ha

Adjust estimate for expected cull and waste (for example: 10%).

Volume = (105 m³/ha) x (0.90) = 94 m³/ha

(3B) Determine Sawlog Volume:

From Table 3, look up volume for SBA = 6 m²/ha and Lorey's Ht. = 17 m.

Volume = 42 m³/ha

From Table A5-3 (Appendix 5), look up correction factor for sawlog red spruce at Lorey's Ht. = 17 m and QDBH = 23 cm.

Correction Factor = 1.04

Apply correction factor to estimate Red Spruce Sawlog Volume.

(42 m³/ha) x (1.04) = 44 m³/ha

Adjust estimate for expected cull and waste (for example: 5%).

Volume = (44 m³/ha) x (0.95) = 42 m³/ha

4. Example 4 is a tolerant hardwood stand of mixed species, with no species dominant in any class. Diameter measurements were taken for more accuracy. An estimate of merchantable top-wood from the sawlog class is also required. The stand will be harvested using a tree-length system.

| Stand | Plot # | Merch. Trees/Plot | Sawlog Trees/Plot | Merch. Lorey's Ht. (m) | Sawlog Lorey's Ht. (m) | Merch. QDBH (cm) | Sawlog QDBH (cm) |
|----------------|------------------------------|----------------------|----------------------|------------------------------|------------------------------|------------------------|------------------------|
| 1 | 1 | 14 | 4 | 14.0 | 18.0 | | |
| | 2 | 12 | 6 | 14.6 | 19.6 | | |
| | 3 | 16 | 2 | 13.7 | 18.5 | | |
| | 4 | 12 | 5 | 13.2 | 21.0 | | |
| Mean | | 13.50 | 4.25 | 13.9 | 19.3 | 14.2 | 25.6 |
| BAF = 2 | BA (m²/ha) | 27.00 | 8.50 | | | | |

(4A) Determine Merchantable Volume:

From Table 8, look up volume for MBA = 27 m²/ha and Lorey's Ht. = 14 m.

Volume = 138 m³/ha

From Table 9, look up diameter correction factor for hardwood at Lorey's Ht. = 14 m and QDBH = 14 cm.

Correction Factor = 0.93

Apply correction factor to estimate Hardwood Merchantable Volume.

(138 m³/ha) x (0.93) = 128 m³/ha

Adjust estimate for expected cull and waste (for example: 5%).

Volume = (128 m³/ha) x (0.95) = 122 m³/ha

(4B) Determine Sawlog Volume:

From Table 10, look up volume for SBA = 8 m²/ha and Lorey's Ht. = 19 m.

Volume = 43 m³/ha

From Table 11, look up diameter correction factor for hardwood sawlog at Lorey's Ht. = 19 m and QDBH = 26 cm.

Correction Factor = 0.76

Apply correction factor to estimate Hardwood Sawlog Volume.

(43 m³/ha) x (0.76) = 33 m³/ha

Adjust estimate for expected cull and waste (for example: 10%).

Volume = (33 m³/ha) x (0.90) = 30 m³/ha

(4C) Determine Merchantable Top-wood Volume:

From Table 8, look up volume for MBA = 8 m²/ha and Lorey's Ht. = 19 m.

Volume = 55 m³/ha

From Table 9, look up diameter correction factor for hardwood at Lorey's Ht. = 19 m and QDBH = 26 cm.

Correction Factor = 1.00

Apply correction factor to estimate Hardwood Merchantable Volume.

(55 m³/ha) x (1.00) = 55 m³/ha

Subtract diameter corrected Sawlog Volume from diameter corrected Merchantable Volume.

(55 m³/ha) - (33 m³/ha) = 22 m³/ha

Correct estimate for cull and waste (for example: 10%).

Volume = (22 m³/ha) x (0.90) = 20 m³/ha

Examples 1 to 3 show that by accounting for species, harvesting system, and diameter; estimated merchantable volume decreased from 129 m³/ha to 94 m³/ha. This decrease was due to: (i) the change in harvesting system from tree-length to shortwood; (ii) the smaller than average diameter of the balsam fir; and (iii) an anticipated increase in cull and waste due to rot in the balsam fir. In contrast, sawlog volumes remained essentially the same after applying species and diameter class correction factors. This was due to: (i) the sawlogs being of average diameter for the given height; and (ii) the estimated cull being offset by the volume increase due to species.

Example 4 shows the importance of diameter correction when estimating hardwood volume, especially sawlog volume. Also, by having diameter data available, it was possible to estimate merchantable top-wood volume.

Table 1. Softwood Merchantable Volume Table (m³/ha). *

| MBA (m ² /ha) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 2 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 14 | 15 | 16 | 17 | 18 | 18 |
| 3 | 9 | 11 | 12 | 14 | 15 | 16 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | 26 | 28 |
| 4 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 25 | 27 | 29 | 30 | 32 | 34 | 35 | 37 |
| 5 | 15 | 18 | 20 | 23 | 25 | 27 | 29 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 |
| 6 | 18 | 21 | 24 | 27 | 30 | 33 | 35 | 38 | 41 | 43 | 46 | 48 | 51 | 53 | 55 |
| 7 | 22 | 25 | 28 | 32 | 35 | 38 | 41 | 44 | 47 | 50 | 53 | 56 | 59 | 62 | 64 |
| 8 | 25 | 28 | 32 | 36 | 40 | 44 | 47 | 51 | 54 | 58 | 61 | 64 | 67 | 71 | 74 |
| 9 | 28 | 32 | 36 | 41 | 45 | 49 | 53 | 57 | 61 | 65 | 68 | 72 | 76 | 79 | 83 |
| 10 | 31 | 36 | 40 | 45 | 50 | 54 | 59 | 63 | 68 | 72 | 76 | 80 | 84 | 88 | 92 |
| 11 | 34 | 39 | 44 | 50 | 55 | 60 | 65 | 70 | 74 | 79 | 84 | 88 | 93 | 97 | 101 |
| 12 | 37 | 43 | 49 | 54 | 60 | 65 | 71 | 76 | 81 | 86 | 91 | 96 | 101 | 106 | 111 |
| 13 | 40 | 46 | 53 | 59 | 65 | 71 | 77 | 82 | 88 | 93 | 99 | 104 | 110 | 115 | 120 |
| 14 | 43 | 50 | 57 | 63 | 70 | 76 | 83 | 89 | 95 | 101 | 107 | 112 | 118 | 123 | 129 |
| 15 | 46 | 53 | 61 | 68 | 75 | 82 | 88 | 95 | 102 | 108 | 114 | 120 | 126 | 132 | 138 |
| 16 | 49 | 57 | 65 | 72 | 80 | 87 | 94 | 101 | 108 | 115 | 122 | 128 | 135 | 141 | 147 |
| 17 | 52 | 61 | 69 | 77 | 85 | 93 | 100 | 108 | 115 | 122 | 129 | 136 | 143 | 150 | 157 |
| 18 | 55 | 64 | 73 | 81 | 90 | 98 | 106 | 114 | 122 | 129 | 137 | 144 | 152 | 159 | 166 |
| 19 | 58 | 68 | 77 | 86 | 95 | 103 | 112 | 120 | 129 | 137 | 145 | 152 | 160 | 168 | 175 |
| 20 | 61 | 71 | 81 | 90 | 100 | 109 | 118 | 127 | 135 | 144 | 152 | 160 | 168 | 176 | 184 |
| 21 | 65 | 75 | 85 | 95 | 105 | 114 | 124 | 133 | 142 | 151 | 160 | 168 | 177 | 185 | 193 |
| 22 | 68 | 78 | 89 | 99 | 110 | 120 | 130 | 139 | 149 | 158 | 167 | 176 | 185 | 194 | 203 |
| 23 | 71 | 82 | 93 | 104 | 115 | 125 | 136 | 146 | 156 | 165 | 175 | 184 | 194 | 203 | 212 |
| 24 | 74 | 85 | 97 | 108 | 120 | 131 | 141 | 152 | 162 | 173 | 183 | 192 | 202 | 212 | 221 |
| 25 | 77 | 89 | 101 | 113 | 125 | 136 | 147 | 158 | 169 | 180 | 190 | 200 | 211 | 221 | 230 |
| 26 | 80 | 93 | 105 | 118 | 130 | 142 | 153 | 165 | 176 | 187 | 198 | 209 | 219 | 229 | 240 |
| 27 | 83 | 96 | 109 | 122 | 135 | 147 | 159 | 171 | 183 | 194 | 205 | 217 | 227 | 238 | 249 |
| 28 | 86 | 100 | 113 | 127 | 140 | 152 | 165 | 177 | 189 | 201 | 213 | 225 | 236 | 247 | 258 |
| 29 | 89 | 103 | 117 | 131 | 145 | 158 | 171 | 184 | 196 | 209 | 221 | 233 | 244 | 256 | 267 |
| 30 | 92 | 107 | 121 | 136 | 150 | 163 | 177 | 190 | 203 | 216 | 228 | 241 | 253 | 265 | 276 |
| 31 | 95 | 110 | 125 | 140 | 155 | 169 | 183 | 196 | 210 | 223 | 236 | 249 | 261 | 273 | 286 |
| 32 | 98 | 114 | 129 | 145 | 160 | 174 | 189 | 203 | 217 | 230 | 243 | 257 | 270 | 282 | 295 |
| 33 | 101 | 118 | 133 | 149 | 165 | 180 | 194 | 209 | 223 | 237 | 251 | 265 | 278 | 291 | 304 |
| 34 | 105 | 121 | 138 | 154 | 170 | 185 | 200 | 215 | 230 | 245 | 259 | 273 | 286 | 300 | 313 |
| 35 | 108 | 125 | 142 | 158 | 175 | 191 | 206 | 222 | 237 | 252 | 266 | 281 | 295 | 309 | 322 |
| 36 | 111 | 128 | 146 | 163 | 180 | 196 | 212 | 228 | 244 | 259 | 274 | 289 | 303 | 318 | 332 |
| 37 | 114 | 132 | 150 | 167 | 184 | 201 | 218 | 234 | 250 | 266 | 282 | 297 | 312 | 326 | 341 |
| 38 | 117 | 135 | 154 | 172 | 189 | 207 | 224 | 241 | 257 | 273 | 289 | 305 | 320 | 335 | 350 |
| 39 | 120 | 139 | 158 | 176 | 194 | 212 | 230 | 247 | 264 | 280 | 297 | 313 | 329 | 344 | 359 |
| 40 | 123 | 142 | 162 | 181 | 199 | 218 | 236 | 253 | 271 | 288 | 304 | 321 | 337 | 353 | 368 |
| 41 | 126 | 146 | 166 | 185 | 204 | 223 | 242 | 260 | 277 | 295 | 312 | 329 | 345 | 362 | 378 |
| 42 | 129 | 150 | 170 | 190 | 209 | 229 | 248 | 266 | 284 | 302 | 320 | 337 | 354 | 370 | 387 |
| 43 | 132 | 153 | 174 | 194 | 214 | 234 | 253 | 272 | 291 | 309 | 327 | 345 | 362 | 379 | 396 |
| 44 | 135 | 157 | 178 | 199 | 219 | 240 | 259 | 279 | 298 | 316 | 335 | 353 | 371 | 388 | 405 |
| 45 | 138 | 160 | 182 | 203 | 224 | 245 | 265 | 285 | 305 | 324 | 342 | 361 | 379 | 397 | 415 |
| 46 | 141 | 164 | 186 | 208 | 229 | 250 | 271 | 291 | 311 | 331 | 350 | 369 | 387 | 406 | 424 |
| 47 | 144 | 167 | 190 | 212 | 234 | 256 | 277 | 298 | 318 | 338 | 358 | 377 | 396 | 415 | 433 |
| 48 | 148 | 171 | 194 | 217 | 239 | 261 | 283 | 304 | 325 | 345 | 365 | 385 | 404 | 423 | 442 |
| 49 | 151 | 175 | 198 | 221 | 244 | 267 | 289 | 310 | 332 | 352 | 373 | 393 | 413 | 432 | 451 |
| 50 | 154 | 178 | 202 | 226 | 249 | 272 | 295 | 317 | 338 | 360 | 380 | 401 | 421 | 441 | 461 |
| 51 | 157 | 182 | 206 | 231 | 254 | 278 | 301 | 323 | 345 | 367 | 388 | 409 | 430 | 450 | 470 |
| 52 | 160 | 185 | 210 | 235 | 259 | 283 | 306 | 329 | 352 | 374 | 396 | 417 | 438 | 459 | 479 |
| 53 | 163 | 189 | 214 | 240 | 264 | 289 | 312 | 336 | 359 | 381 | 403 | 425 | 446 | 467 | 488 |
| 54 | 166 | 192 | 218 | 244 | 269 | 294 | 318 | 342 | 365 | 388 | 411 | 433 | 455 | 476 | 497 |
| 55 | 169 | 196 | 222 | 249 | 274 | 299 | 324 | 348 | 372 | 396 | 418 | 441 | 463 | 485 | 507 |
| 56 | 172 | 199 | 227 | 253 | 279 | 305 | 330 | 355 | 379 | 403 | 426 | 449 | 472 | 494 | 516 |
| 57 | 175 | 203 | 231 | 258 | 284 | 310 | 336 | 361 | 386 | 410 | 434 | 457 | 480 | 503 | 525 |
| 58 | 178 | 207 | 235 | 262 | 289 | 316 | 342 | 367 | 392 | 417 | 441 | 465 | 489 | 512 | 534 |
| 59 | 181 | 210 | 239 | 267 | 294 | 321 | 348 | 374 | 399 | 424 | 449 | 473 | 497 | 520 | 543 |
| 60 | 184 | 214 | 243 | 271 | 299 | 327 | 354 | 380 | 406 | 431 | 457 | 481 | 505 | 529 | 553 |

* Based on gross merchantable volume (solid wood, inside bark) of all trees 9.1 cm dbh and greater with 0.15 m stump and top dib 7.62 cm (tree length). See Tables 2, 5, and 6 for adjustments due to diameter class, species, or harvesting method. Appendix 5 contains species-specific correction factors for diameter class and harvesting method. Further reductions should be made for cull and waste after volume determination.

Table 2. Factors for Calculating Softwood Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.70 | 0.67 | 0.66 | 0.64 | 0.63 | 0.63 | 0.62 | 0.61 | 0.61 | 0.61 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| 11 | 0.83 | 0.80 | 0.78 | 0.77 | 0.75 | 0.74 | 0.74 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.71 | 0.71 |
| 12 | 0.92 | 0.89 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 | 0.79 | 0.78 | 0.78 |
| 13 | 0.98 | 0.95 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.84 | 0.83 |
| 14 | 1.02 | 0.99 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 |
| 15 | 1.06 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 |
| 16 | 1.08 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 |
| 17 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 |
| 18 | 1.11 | 1.07 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 |
| 19 | 1.12 | 1.08 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 |
| 20 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 |
| 21 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 |
| 22 | 1.15 | 1.11 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 |
| 23 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 24 | 1.16 | 1.12 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 |
| 25 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 |
| 26 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 27 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 28 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 29 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 30 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 31 | 1.18 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 32 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 33 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 34 | 1.18 | 1.14 | 1.11 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 35 | 1.18 | 1.14 | 1.11 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 36 | 1.18 | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 37 | | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 38 | | | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 39 | | | | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 40 | | | | | 1.07 | 1.06 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 41 | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 42 | | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 43 | | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 44 | | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 45 | | | | | | | | | | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 46 | | | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 47 | | | | | | | | | | | | 1.02 | 1.01 | 1.01 | 1.01 |
| 48 | | | | | | | | | | | | | 1.01 | 1.01 | 1.01 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.01 |
| 50 | | | | | | | | | | | | | | | 1.01 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

Shaded area represents 95% confidence interval for predicted diameters in each height class (see Appendix 3).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table 3. Softwood Sawlog Volume Table (m³/ha). *

| SBA (m ² /ha) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|-----------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 2 | 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 17 | 18 | 19 | 20 |
| 3 | 14 | 16 | 17 | 18 | 20 | 21 | 22 | 24 | 25 | 26 | 27 | 28 | 30 |
| 4 | 19 | 21 | 23 | 25 | 26 | 28 | 30 | 31 | 33 | 35 | 36 | 38 | 39 |
| 5 | 24 | 26 | 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 |
| 6 | 29 | 32 | 34 | 37 | 40 | 42 | 45 | 47 | 50 | 52 | 55 | 57 | 59 |
| 7 | 34 | 37 | 40 | 43 | 46 | 49 | 52 | 55 | 58 | 61 | 64 | 66 | 69 |
| 8 | 38 | 42 | 46 | 49 | 53 | 56 | 60 | 63 | 66 | 70 | 73 | 76 | 79 |
| 9 | 43 | 47 | 51 | 55 | 59 | 63 | 67 | 71 | 75 | 78 | 82 | 85 | 89 |
| 10 | 48 | 53 | 57 | 62 | 66 | 70 | 75 | 79 | 83 | 87 | 91 | 95 | 99 |
| 11 | 53 | 58 | 63 | 68 | 73 | 77 | 82 | 87 | 91 | 96 | 100 | 104 | 109 |
| 12 | 58 | 63 | 69 | 74 | 79 | 84 | 89 | 94 | 99 | 104 | 109 | 114 | 118 |
| 13 | 62 | 68 | 74 | 80 | 86 | 91 | 97 | 102 | 108 | 113 | 118 | 123 | 128 |
| 14 | 67 | 74 | 80 | 86 | 92 | 98 | 104 | 110 | 116 | 122 | 127 | 133 | 138 |
| 15 | 72 | 79 | 86 | 92 | 99 | 105 | 112 | 118 | 124 | 130 | 136 | 142 | 148 |
| 16 | 77 | 84 | 91 | 99 | 106 | 112 | 119 | 126 | 133 | 139 | 145 | 152 | 158 |
| 17 | 82 | 89 | 97 | 105 | 112 | 119 | 127 | 134 | 141 | 148 | 154 | 161 | 168 |
| 18 | 86 | 95 | 103 | 111 | 119 | 127 | 134 | 142 | 149 | 156 | 164 | 171 | 178 |
| 19 | 91 | 100 | 108 | 117 | 125 | 134 | 142 | 150 | 157 | 165 | 173 | 180 | 187 |
| 20 | 96 | 105 | 114 | 123 | 132 | 141 | 149 | 157 | 166 | 174 | 182 | 190 | 197 |
| 21 | 101 | 110 | 120 | 129 | 139 | 148 | 157 | 165 | 174 | 182 | 191 | 199 | 207 |
| 22 | 106 | 116 | 126 | 135 | 145 | 155 | 164 | 173 | 182 | 191 | 200 | 209 | 217 |
| 23 | 110 | 121 | 131 | 142 | 152 | 162 | 171 | 181 | 191 | 200 | 209 | 218 | 227 |
| 24 | 115 | 126 | 137 | 148 | 158 | 169 | 179 | 189 | 199 | 209 | 218 | 228 | 237 |
| 25 | 120 | 131 | 143 | 154 | 165 | 176 | 186 | 197 | 207 | 217 | 227 | 237 | 247 |
| 26 | 125 | 137 | 148 | 160 | 171 | 183 | 194 | 205 | 215 | 226 | 236 | 246 | 257 |
| 27 | 130 | 142 | 154 | 166 | 178 | 190 | 201 | 213 | 224 | 235 | 245 | 256 | 266 |
| 28 | 134 | 147 | 160 | 172 | 185 | 197 | 209 | 220 | 232 | 243 | 254 | 265 | 276 |
| 29 | 139 | 152 | 166 | 179 | 191 | 204 | 216 | 228 | 240 | 252 | 264 | 275 | 286 |
| 30 | 144 | 158 | 171 | 185 | 198 | 211 | 224 | 236 | 249 | 261 | 273 | 284 | 296 |
| 31 | 149 | 163 | 177 | 191 | 204 | 218 | 231 | 244 | 257 | 269 | 282 | 294 | 306 |
| 32 | 154 | 168 | 183 | 197 | 211 | 225 | 239 | 252 | 265 | 278 | 291 | 303 | 316 |
| 33 | 158 | 173 | 188 | 203 | 218 | 232 | 246 | 260 | 273 | 287 | 300 | 313 | 326 |
| 34 | 163 | 179 | 194 | 209 | 224 | 239 | 253 | 268 | 282 | 295 | 309 | 322 | 336 |
| 35 | 168 | 184 | 200 | 215 | 231 | 246 | 261 | 276 | 290 | 304 | 318 | 332 | 345 |
| 36 | 173 | 189 | 206 | 222 | 237 | 253 | 268 | 283 | 298 | 313 | 327 | 341 | 355 |
| 37 | 177 | 195 | 211 | 228 | 244 | 260 | 276 | 291 | 306 | 321 | 336 | 351 | 365 |
| 38 | 182 | 200 | 217 | 234 | 251 | 267 | 283 | 299 | 315 | 330 | 345 | 360 | 375 |
| 39 | 187 | 205 | 223 | 240 | 257 | 274 | 291 | 307 | 323 | 339 | 354 | 370 | 385 |
| 40 | 192 | 210 | 228 | 246 | 264 | 281 | 298 | 315 | 331 | 348 | 364 | 379 | 395 |
| 41 | 197 | 216 | 234 | 252 | 270 | 288 | 306 | 323 | 340 | 356 | 373 | 389 | 405 |
| 42 | 201 | 221 | 240 | 259 | 277 | 295 | 313 | 331 | 348 | 365 | 382 | 398 | 414 |
| 43 | 206 | 226 | 246 | 265 | 284 | 302 | 320 | 338 | 356 | 374 | 391 | 408 | 424 |
| 44 | 211 | 231 | 251 | 271 | 290 | 309 | 328 | 346 | 364 | 382 | 400 | 417 | 434 |
| 45 | 216 | 237 | 257 | 277 | 297 | 316 | 335 | 354 | 373 | 391 | 409 | 427 | 444 |
| 46 | 221 | 242 | 263 | 283 | 303 | 323 | 343 | 362 | 381 | 400 | 418 | 436 | 454 |
| 47 | 225 | 247 | 268 | 289 | 310 | 330 | 350 | 370 | 389 | 408 | 427 | 446 | 464 |
| 48 | 230 | 252 | 274 | 296 | 317 | 337 | 358 | 378 | 398 | 417 | 436 | 455 | 474 |
| 49 | 235 | 258 | 280 | 302 | 323 | 344 | 365 | 386 | 406 | 426 | 445 | 465 | 484 |
| 50 | 240 | 263 | 286 | 308 | 330 | 351 | 373 | 394 | 414 | 434 | 454 | 474 | 493 |
| 51 | 245 | 268 | 291 | 314 | 336 | 358 | 380 | 401 | 422 | 443 | 463 | 484 | 503 |
| 52 | 249 | 273 | 297 | 320 | 343 | 365 | 388 | 409 | 431 | 452 | 473 | 493 | 513 |
| 53 | 254 | 279 | 303 | 326 | 350 | 372 | 395 | 417 | 439 | 461 | 482 | 502 | 523 |
| 54 | 259 | 284 | 308 | 332 | 356 | 380 | 402 | 425 | 447 | 469 | 491 | 512 | 533 |
| 55 | 264 | 289 | 314 | 339 | 363 | 387 | 410 | 433 | 456 | 478 | 500 | 521 | 543 |
| 56 | 269 | 294 | 320 | 345 | 369 | 394 | 417 | 441 | 464 | 487 | 509 | 531 | 553 |
| 57 | 273 | 300 | 325 | 351 | 376 | 401 | 425 | 449 | 472 | 495 | 518 | 540 | 562 |
| 58 | 278 | 305 | 331 | 357 | 383 | 408 | 432 | 457 | 480 | 504 | 527 | 550 | 572 |
| 59 | 283 | 310 | 337 | 363 | 389 | 415 | 440 | 464 | 489 | 513 | 536 | 559 | 582 |
| 60 | 288 | 315 | 343 | 369 | 396 | 422 | 447 | 472 | 497 | 521 | 545 | 569 | 592 |

* Based on gross sawlog volume (solid wood, inside bark) of all trees 14.1 cm dbh and greater with 0.15 m stump and top dib 10.16 cm (tree length). See Tables 4 and 7 for adjustments due to diameter class or species. Appendix 5 contains species-specific correction factors for diameter class. Further reductions should be made for cull and waste after volume determination.

Table 4. Factors for Calculating Softwood Sawlog Volume (m³/ha) at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 | 0.80 | 0.79 | 0.79 | 0.79 |
| 17 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 |
| 18 | 0.94 | 0.93 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 |
| 19 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 | 0.88 |
| 20 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 |
| 21 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |
| 22 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 |
| 23 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 |
| 24 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 |
| 25 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 |
| 26 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 |
| 27 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 |
| 28 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 |
| 29 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 30 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 31 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 32 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 33 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 34 | 1.09 | 1.07 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 35 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 36 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 37 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 38 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 39 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 40 | 1.10 | 1.08 | 1.07 | 1.06 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 41 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 42 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 43 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 44 | | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 45 | | | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 46 | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 47 | | | | | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 48 | | | | | | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 49 | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 50 | | | | | | | | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 51 | | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| 52 | | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 |
| 53 | | | | | | | | | | | 1.02 | 1.01 | 1.01 |
| 54 | | | | | | | | | | | | 1.01 | 1.01 |
| 55 | | | | | | | | | | | | | 1.01 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree length).

Shaded area represents 95% confidence interval for predicted diameters in each height class (see Appendix 3).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table 5. Factors for Calculating Softwood Species Merchantable Volume (m³/ha) ⁽¹⁾

| Species * | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| R.Spruce | 1.14 | 1.13 | 1.12 | 1.10 | 1.09 | 1.08 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| B.Fir | 1.09 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 |
| W.Spruce | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |
| B.Spruce | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| R.Pine | 1.05 | 1.05 | 1.05 | 1.05 | 1.04 | 1.04 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 | 1.02 | 1.02 |
| W.Pine | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hem. | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 |

(1) Based on gross merchantable volume (solid wood, inside bark) of all trees 9.1 cm dbh and greater with 0.15 m stump and top dib 7.62 cm (tree length). To obtain Species Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table 6. Factors for Calculating Softwood Species Shortwood Volume (m³/ha) ⁽²⁾

| Species * | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| R.Spruce | 0.98 | 1.00 | 1.02 | 1.03 | 1.03 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| B.Fir | 0.91 | 0.93 | 0.94 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 |
| W.Spruce | 0.81 | 0.84 | 0.87 | 0.88 | 0.90 | 0.90 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 |
| B.Spruce | 0.87 | 0.90 | 0.91 | 0.92 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 |
| R.Pine | 0.89 | 0.93 | 0.95 | 0.97 | 0.98 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| W.Pine | 0.82 | 0.86 | 0.89 | 0.91 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 | 0.97 | 0.98 | 0.98 | 0.98 | 0.98 |
| Hem. | 0.85 | 0.88 | 0.91 | 0.92 | 0.93 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| S.Wood | 0.82 | 0.86 | 0.89 | 0.91 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 | 0.97 | 0.98 | 0.98 | 0.98 | 0.98 |

(2) Based on gross merchantable volume (solid wood, inside bark) of all trees 9.1 cm dbh and greater with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height. To obtain Species Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table 7. Factors for Calculating Softwood Species Sawlog Volume (m³/ha) ⁽³⁾

| Species * | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|-----------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| R.Spruce | 1.10 | 1.09 | 1.08 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| B.Fir | 1.02 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 |
| W.Spruce | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 |
| B.Spruce | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 |
| R.Pine | 1.05 | 1.05 | 1.05 | 1.04 | 1.04 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 |
| W.Pine | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hem. | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 |

(3) Based on gross sawlog volume (solid wood, inside bark) of all trees 14.1 cm dbh and greater with 0.15 m stump and top dib 10.16 cm (tree length). To obtain Species Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

* Species: R.Spruce = Red Spruce, B.Fir = Balsam Fir, W.Spruce = White Spruce, B.Spruce = Black Spruce, R.Pine = Red Pine, W.Pine = White Pine, Hem. = Hemlock, S.Wood = generic softwood.

Table 8. Hardwood Merchantable Volume Table (m³/ha). *

| MBA (m ² /ha) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 2 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 12 | 13 | 14 | 14 | 15 | 16 |
| 3 | 8 | 9 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 19 | 20 | 21 | 21 | 22 | 23 |
| 4 | 11 | 13 | 14 | 16 | 17 | 19 | 20 | 22 | 23 | 25 | 26 | 27 | 29 | 30 | 31 |
| 5 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 27 | 29 | 31 | 33 | 34 | 36 | 37 | 39 |
| 6 | 16 | 19 | 21 | 24 | 26 | 28 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 |
| 7 | 19 | 22 | 25 | 28 | 30 | 33 | 36 | 38 | 41 | 43 | 46 | 48 | 50 | 52 | 55 |
| 8 | 22 | 25 | 28 | 32 | 35 | 38 | 41 | 44 | 47 | 49 | 52 | 55 | 57 | 60 | 62 |
| 9 | 24 | 28 | 32 | 36 | 39 | 43 | 46 | 49 | 52 | 56 | 59 | 62 | 64 | 67 | 70 |
| 10 | 27 | 31 | 35 | 40 | 43 | 47 | 51 | 55 | 58 | 62 | 65 | 68 | 72 | 75 | 78 |
| 11 | 30 | 34 | 39 | 43 | 48 | 52 | 56 | 60 | 64 | 68 | 72 | 75 | 79 | 82 | 86 |
| 12 | 32 | 38 | 43 | 47 | 52 | 57 | 61 | 66 | 70 | 74 | 78 | 82 | 86 | 90 | 93 |
| 13 | 35 | 41 | 46 | 51 | 57 | 62 | 66 | 71 | 76 | 80 | 85 | 89 | 93 | 97 | 101 |
| 14 | 38 | 44 | 50 | 55 | 61 | 66 | 71 | 77 | 82 | 86 | 91 | 96 | 100 | 105 | 109 |
| 15 | 41 | 47 | 53 | 59 | 65 | 71 | 77 | 82 | 87 | 93 | 98 | 103 | 107 | 112 | 117 |
| 16 | 43 | 50 | 57 | 63 | 70 | 76 | 82 | 88 | 93 | 99 | 104 | 109 | 115 | 120 | 125 |
| 17 | 46 | 53 | 60 | 67 | 74 | 80 | 87 | 93 | 99 | 105 | 111 | 116 | 122 | 127 | 132 |
| 18 | 49 | 56 | 64 | 71 | 78 | 85 | 92 | 98 | 105 | 111 | 117 | 123 | 129 | 135 | 140 |
| 19 | 51 | 59 | 67 | 75 | 83 | 90 | 97 | 104 | 111 | 117 | 124 | 130 | 136 | 142 | 148 |
| 20 | 54 | 63 | 71 | 79 | 87 | 95 | 102 | 109 | 116 | 123 | 130 | 137 | 143 | 150 | 156 |
| 21 | 57 | 66 | 74 | 83 | 91 | 99 | 107 | 115 | 122 | 130 | 137 | 144 | 150 | 157 | 164 |
| 22 | 59 | 69 | 78 | 87 | 96 | 104 | 112 | 120 | 128 | 136 | 143 | 150 | 158 | 165 | 171 |
| 23 | 62 | 72 | 82 | 91 | 100 | 109 | 117 | 126 | 134 | 142 | 150 | 157 | 165 | 172 | 179 |
| 24 | 65 | 75 | 85 | 95 | 104 | 114 | 123 | 131 | 140 | 148 | 156 | 164 | 172 | 179 | 187 |
| 25 | 68 | 78 | 89 | 99 | 109 | 118 | 128 | 137 | 146 | 154 | 163 | 171 | 179 | 187 | 195 |
| 26 | 70 | 81 | 92 | 103 | 113 | 123 | 133 | 142 | 151 | 160 | 169 | 178 | 186 | 194 | 202 |
| 27 | 73 | 84 | 96 | 107 | 117 | 128 | 138 | 148 | 157 | 167 | 176 | 185 | 193 | 202 | 210 |
| 28 | 76 | 88 | 99 | 111 | 122 | 132 | 143 | 153 | 163 | 173 | 182 | 191 | 201 | 209 | 218 |
| 29 | 78 | 91 | 103 | 115 | 126 | 137 | 148 | 159 | 169 | 179 | 189 | 198 | 208 | 217 | 226 |
| 30 | 81 | 94 | 106 | 119 | 130 | 142 | 153 | 164 | 175 | 185 | 195 | 205 | 215 | 224 | 234 |
| 31 | 84 | 97 | 110 | 122 | 135 | 147 | 158 | 170 | 181 | 191 | 202 | 212 | 222 | 232 | 241 |
| 32 | 86 | 100 | 113 | 126 | 139 | 151 | 163 | 175 | 186 | 197 | 208 | 219 | 229 | 239 | 249 |
| 33 | 89 | 103 | 117 | 130 | 143 | 156 | 168 | 180 | 192 | 204 | 215 | 226 | 236 | 247 | 257 |
| 34 | 92 | 106 | 121 | 134 | 148 | 161 | 174 | 186 | 198 | 210 | 221 | 233 | 243 | 254 | 265 |
| 35 | 95 | 109 | 124 | 138 | 152 | 166 | 179 | 191 | 204 | 216 | 228 | 239 | 251 | 262 | 273 |
| 36 | 97 | 113 | 128 | 142 | 156 | 170 | 184 | 197 | 210 | 222 | 234 | 246 | 258 | 269 | 280 |
| 37 | 100 | 116 | 131 | 146 | 161 | 175 | 189 | 202 | 215 | 228 | 241 | 253 | 265 | 277 | 288 |
| 38 | 103 | 119 | 135 | 150 | 165 | 180 | 194 | 208 | 221 | 234 | 247 | 260 | 272 | 284 | 296 |
| 39 | 105 | 122 | 138 | 154 | 170 | 185 | 199 | 213 | 227 | 241 | 254 | 267 | 279 | 292 | 304 |
| 40 | 108 | 125 | 142 | 158 | 174 | 189 | 204 | 219 | 233 | 247 | 260 | 274 | 286 | 299 | 312 |
| 41 | 111 | 128 | 145 | 162 | 178 | 194 | 209 | 224 | 239 | 253 | 267 | 280 | 294 | 307 | 319 |
| 42 | 113 | 131 | 149 | 166 | 183 | 199 | 214 | 230 | 245 | 259 | 273 | 287 | 301 | 314 | 327 |
| 43 | 116 | 135 | 152 | 170 | 187 | 203 | 220 | 235 | 250 | 265 | 280 | 294 | 308 | 322 | 335 |
| 44 | 119 | 138 | 156 | 174 | 191 | 208 | 225 | 241 | 256 | 271 | 286 | 301 | 315 | 329 | 343 |
| 45 | 122 | 141 | 160 | 178 | 196 | 213 | 230 | 246 | 262 | 278 | 293 | 308 | 322 | 337 | 350 |
| 46 | 124 | 144 | 163 | 182 | 200 | 218 | 235 | 252 | 268 | 284 | 299 | 315 | 329 | 344 | 358 |
| 47 | 127 | 147 | 167 | 186 | 204 | 222 | 240 | 257 | 274 | 290 | 306 | 321 | 337 | 351 | 366 |
| 48 | 130 | 150 | 170 | 190 | 209 | 227 | 245 | 263 | 280 | 296 | 312 | 328 | 344 | 359 | 374 |
| 49 | 132 | 153 | 174 | 194 | 213 | 232 | 250 | 268 | 285 | 302 | 319 | 335 | 351 | 366 | 382 |
| 50 | 135 | 156 | 177 | 198 | 217 | 237 | 255 | 273 | 291 | 309 | 325 | 342 | 358 | 374 | 389 |
| 51 | 138 | 160 | 181 | 202 | 222 | 241 | 260 | 279 | 297 | 315 | 332 | 349 | 365 | 381 | 397 |
| 52 | 140 | 163 | 184 | 205 | 226 | 246 | 265 | 284 | 303 | 321 | 338 | 356 | 372 | 389 | 405 |
| 53 | 143 | 166 | 188 | 209 | 230 | 251 | 271 | 290 | 309 | 327 | 345 | 362 | 380 | 396 | 413 |
| 54 | 146 | 169 | 191 | 213 | 235 | 255 | 276 | 295 | 315 | 333 | 351 | 369 | 387 | 404 | 421 |
| 55 | 149 | 172 | 195 | 217 | 239 | 260 | 281 | 301 | 320 | 339 | 358 | 376 | 394 | 411 | 428 |
| 56 | 151 | 175 | 199 | 221 | 243 | 265 | 286 | 306 | 326 | 346 | 364 | 383 | 401 | 419 | 436 |
| 57 | 154 | 178 | 202 | 225 | 248 | 270 | 291 | 312 | 332 | 352 | 371 | 390 | 408 | 426 | 444 |
| 58 | 157 | 181 | 206 | 229 | 252 | 274 | 296 | 317 | 338 | 358 | 377 | 397 | 415 | 434 | 452 |
| 59 | 159 | 185 | 209 | 233 | 256 | 279 | 301 | 323 | 344 | 364 | 384 | 403 | 423 | 441 | 460 |
| 60 | 162 | 188 | 213 | 237 | 261 | 284 | 306 | 328 | 349 | 370 | 390 | 410 | 430 | 449 | 467 |

* Based on gross merchantable volume (solid wood, inside bark) of all trees 9.1 cm dbh and greater with 0.15 m stump and top dib 7.62 cm (tree length). See Tables 9, 12, and 13 for adjustments due to diameter class, species, or harvesting method. Appendix 5 contains species-specific correction factors for diameter class and harvesting method. Further reductions should be made for cull and waste after volume determination.

Table 9. Factors for Calculating Hardwood Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.73 | 0.71 | 0.69 | 0.68 | 0.67 | 0.66 | 0.65 | 0.65 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.63 |
| 11 | 0.87 | 0.84 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.76 | 0.76 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 12 | 0.95 | 0.92 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.82 | 0.82 | 0.82 | 0.82 |
| 13 | 1.01 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| 14 | 1.05 | 1.01 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 |
| 15 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 |
| 16 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| 17 | 1.11 | 1.07 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 |
| 18 | 1.13 | 1.08 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 |
| 19 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 |
| 20 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| 21 | 1.15 | 1.11 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 22 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 |
| 23 | 1.16 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 |
| 24 | 1.16 | 1.12 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 25 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 26 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 0.99 |
| 27 | 1.17 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 28 | 1.17 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 29 | 1.17 | 1.13 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 30 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 31 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 32 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 33 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 34 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 35 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 36 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 37 | | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 38 | | | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 39 | | | | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 40 | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 41 | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 42 | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 43 | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 44 | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 45 | | | | | | | | | | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 46 | | | | | | | | | | | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| 47 | | | | | | | | | | | | 1.01 | 1.01 | 1.01 | 1.01 |
| 48 | | | | | | | | | | | | | 1.01 | 1.01 | 1.01 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.01 |
| 50 | | | | | | | | | | | | | | | 1.01 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

Shaded area represents 95% confidence interval for predicted diameters in each height class (see Appendix 3).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table 10. Hardwood Sawlog Volume Table (m³/ha). *

| SBA (m ² /ha) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|-----------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 2 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 12 | 13 | 14 | 15 |
| 3 | 8 | 9 | 10 | 12 | 13 | 14 | 15 | 16 | 17 | 19 | 20 | 21 | 22 |
| 4 | 11 | 12 | 14 | 15 | 17 | 19 | 20 | 22 | 23 | 25 | 26 | 28 | 29 |
| 5 | 13 | 15 | 17 | 19 | 21 | 23 | 25 | 27 | 29 | 31 | 33 | 35 | 36 |
| 6 | 16 | 18 | 21 | 23 | 26 | 28 | 30 | 33 | 35 | 37 | 39 | 42 | 44 |
| 7 | 19 | 21 | 24 | 27 | 30 | 33 | 35 | 38 | 41 | 43 | 46 | 48 | 51 |
| 8 | 21 | 25 | 28 | 31 | 34 | 37 | 40 | 43 | 46 | 50 | 52 | 55 | 58 |
| 9 | 24 | 28 | 31 | 35 | 38 | 42 | 45 | 49 | 52 | 56 | 59 | 62 | 66 |
| 10 | 27 | 31 | 35 | 39 | 43 | 47 | 50 | 54 | 58 | 62 | 66 | 69 | 73 |
| 11 | 29 | 34 | 38 | 42 | 47 | 51 | 55 | 60 | 64 | 68 | 72 | 76 | 80 |
| 12 | 32 | 37 | 42 | 46 | 51 | 56 | 60 | 65 | 70 | 74 | 79 | 83 | 87 |
| 13 | 35 | 40 | 45 | 50 | 55 | 60 | 66 | 71 | 76 | 80 | 85 | 90 | 95 |
| 14 | 37 | 43 | 48 | 54 | 60 | 65 | 71 | 76 | 81 | 87 | 92 | 97 | 102 |
| 15 | 40 | 46 | 52 | 58 | 64 | 70 | 76 | 81 | 87 | 93 | 98 | 104 | 109 |
| 16 | 43 | 49 | 55 | 62 | 68 | 74 | 81 | 87 | 93 | 99 | 105 | 111 | 117 |
| 17 | 45 | 52 | 59 | 66 | 72 | 79 | 86 | 92 | 99 | 105 | 112 | 118 | 124 |
| 18 | 48 | 55 | 62 | 69 | 77 | 84 | 91 | 98 | 105 | 111 | 118 | 125 | 131 |
| 19 | 51 | 58 | 66 | 73 | 81 | 88 | 96 | 103 | 110 | 118 | 125 | 132 | 138 |
| 20 | 53 | 61 | 69 | 77 | 85 | 93 | 101 | 109 | 116 | 124 | 131 | 139 | 146 |
| 21 | 56 | 64 | 73 | 81 | 89 | 98 | 106 | 114 | 122 | 130 | 138 | 145 | 153 |
| 22 | 59 | 67 | 76 | 85 | 94 | 102 | 111 | 119 | 128 | 136 | 144 | 152 | 160 |
| 23 | 61 | 70 | 80 | 89 | 98 | 107 | 116 | 125 | 134 | 142 | 151 | 159 | 168 |
| 24 | 64 | 74 | 83 | 93 | 102 | 112 | 121 | 130 | 139 | 149 | 157 | 166 | 175 |
| 25 | 67 | 77 | 87 | 96 | 106 | 116 | 126 | 136 | 145 | 155 | 164 | 173 | 182 |
| 26 | 69 | 80 | 90 | 100 | 111 | 121 | 131 | 141 | 151 | 161 | 171 | 180 | 189 |
| 27 | 72 | 83 | 93 | 104 | 115 | 126 | 136 | 147 | 157 | 167 | 177 | 187 | 197 |
| 28 | 75 | 86 | 97 | 108 | 119 | 130 | 141 | 152 | 163 | 173 | 184 | 194 | 204 |
| 29 | 77 | 89 | 100 | 112 | 123 | 135 | 146 | 157 | 169 | 179 | 190 | 201 | 211 |
| 30 | 80 | 92 | 104 | 116 | 128 | 140 | 151 | 163 | 174 | 186 | 197 | 208 | 219 |
| 31 | 83 | 95 | 107 | 120 | 132 | 144 | 156 | 168 | 180 | 192 | 203 | 215 | 226 |
| 32 | 86 | 98 | 111 | 123 | 136 | 149 | 161 | 174 | 186 | 198 | 210 | 222 | 233 |
| 33 | 88 | 101 | 114 | 127 | 140 | 153 | 166 | 179 | 192 | 204 | 216 | 229 | 240 |
| 34 | 91 | 104 | 118 | 131 | 145 | 158 | 171 | 185 | 198 | 210 | 223 | 235 | 248 |
| 35 | 94 | 107 | 121 | 135 | 149 | 163 | 176 | 190 | 203 | 217 | 230 | 242 | 255 |
| 36 | 96 | 110 | 125 | 139 | 153 | 167 | 181 | 195 | 209 | 223 | 236 | 249 | 262 |
| 37 | 99 | 113 | 128 | 143 | 157 | 172 | 187 | 201 | 215 | 229 | 243 | 256 | 269 |
| 38 | 102 | 116 | 132 | 147 | 162 | 177 | 192 | 206 | 221 | 235 | 249 | 263 | 277 |
| 39 | 104 | 120 | 135 | 150 | 166 | 181 | 197 | 212 | 227 | 241 | 256 | 270 | 284 |
| 40 | 107 | 123 | 138 | 154 | 170 | 186 | 202 | 217 | 232 | 248 | 262 | 277 | 291 |
| 41 | 110 | 126 | 142 | 158 | 174 | 191 | 207 | 223 | 238 | 254 | 269 | 284 | 299 |
| 42 | 112 | 129 | 145 | 162 | 179 | 195 | 212 | 228 | 244 | 260 | 276 | 291 | 306 |
| 43 | 115 | 132 | 149 | 166 | 183 | 200 | 217 | 233 | 250 | 266 | 282 | 298 | 313 |
| 44 | 118 | 135 | 152 | 170 | 187 | 205 | 222 | 239 | 256 | 272 | 289 | 305 | 320 |
| 45 | 120 | 138 | 156 | 174 | 191 | 209 | 227 | 244 | 262 | 278 | 295 | 312 | 328 |
| 46 | 123 | 141 | 159 | 177 | 196 | 214 | 232 | 250 | 267 | 285 | 302 | 319 | 335 |
| 47 | 126 | 144 | 163 | 181 | 200 | 219 | 237 | 255 | 273 | 291 | 308 | 325 | 342 |
| 48 | 128 | 147 | 166 | 185 | 204 | 223 | 242 | 261 | 279 | 297 | 315 | 332 | 350 |
| 49 | 131 | 150 | 170 | 189 | 209 | 228 | 247 | 266 | 285 | 303 | 321 | 339 | 357 |
| 50 | 134 | 153 | 173 | 193 | 213 | 233 | 252 | 271 | 291 | 309 | 328 | 346 | 364 |
| 51 | 136 | 156 | 177 | 197 | 217 | 237 | 257 | 277 | 296 | 316 | 335 | 353 | 371 |
| 52 | 139 | 159 | 180 | 201 | 221 | 242 | 262 | 282 | 302 | 322 | 341 | 360 | 379 |
| 53 | 142 | 162 | 183 | 205 | 226 | 246 | 267 | 288 | 308 | 328 | 348 | 367 | 386 |
| 54 | 144 | 166 | 187 | 208 | 230 | 251 | 272 | 293 | 314 | 334 | 354 | 374 | 393 |
| 55 | 147 | 169 | 190 | 212 | 234 | 256 | 277 | 299 | 320 | 340 | 361 | 381 | 401 |
| 56 | 150 | 172 | 194 | 216 | 238 | 260 | 282 | 304 | 325 | 347 | 367 | 388 | 408 |
| 57 | 152 | 175 | 197 | 220 | 243 | 265 | 287 | 309 | 331 | 353 | 374 | 395 | 415 |
| 58 | 155 | 178 | 201 | 224 | 247 | 270 | 292 | 315 | 337 | 359 | 380 | 402 | 422 |
| 59 | 158 | 181 | 204 | 228 | 251 | 274 | 297 | 320 | 343 | 365 | 387 | 409 | 430 |
| 60 | 160 | 184 | 208 | 232 | 255 | 279 | 302 | 326 | 349 | 371 | 394 | 416 | 437 |

* Based on gross sawlog volume (solid wood, inside bark) of all trees 21.1 cm dbh and greater with 0.15 m stump and top dib 20.32 cm (tree length). See Tables 11 and 14 for adjustments due to diameter class or species. Appendix 5 contains species-specific correction factors for diameter class. Further reductions should be made for cull and waste after volume determination.

Table 11. Factors for Calculating Hardwood Sawlog Volume (m³/ha) at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 22 | 0.39 | 0.37 | 0.35 | 0.33 | 0.32 | 0.31 | 0.30 | 0.29 | 0.29 | 0.28 | 0.28 | 0.27 | 0.27 |
| 23 | 0.60 | 0.56 | 0.53 | 0.51 | 0.49 | 0.47 | 0.46 | 0.45 | 0.44 | 0.43 | 0.42 | 0.41 | 0.41 |
| 24 | 0.77 | 0.72 | 0.68 | 0.65 | 0.63 | 0.61 | 0.59 | 0.57 | 0.56 | 0.55 | 0.54 | 0.53 | 0.52 |
| 25 | 0.91 | 0.85 | 0.80 | 0.77 | 0.74 | 0.71 | 0.69 | 0.67 | 0.66 | 0.64 | 0.63 | 0.62 | 0.61 |
| 26 | 1.02 | 0.96 | 0.91 | 0.86 | 0.83 | 0.80 | 0.78 | 0.76 | 0.74 | 0.72 | 0.71 | 0.70 | 0.69 |
| 27 | 1.11 | 1.04 | 0.99 | 0.94 | 0.91 | 0.87 | 0.85 | 0.82 | 0.81 | 0.79 | 0.77 | 0.76 | 0.75 |
| 28 | 1.19 | 1.12 | 1.06 | 1.01 | 0.97 | 0.94 | 0.91 | 0.88 | 0.86 | 0.84 | 0.83 | 0.81 | 0.80 |
| 29 | 1.26 | 1.18 | 1.12 | 1.06 | 1.02 | 0.99 | 0.96 | 0.93 | 0.91 | 0.89 | 0.87 | 0.86 | 0.85 |
| 30 | 1.31 | 1.23 | 1.17 | 1.11 | 1.07 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 |
| 31 | 1.36 | 1.28 | 1.21 | 1.15 | 1.11 | 1.07 | 1.03 | 1.01 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 |
| 32 | 1.40 | 1.31 | 1.24 | 1.19 | 1.14 | 1.10 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 |
| 33 | 1.44 | 1.35 | 1.27 | 1.22 | 1.17 | 1.13 | 1.09 | 1.06 | 1.04 | 1.01 | 1.00 | 0.98 | 0.96 |
| 34 | 1.47 | 1.38 | 1.30 | 1.24 | 1.19 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 |
| 35 | 1.49 | 1.40 | 1.32 | 1.26 | 1.21 | 1.17 | 1.13 | 1.10 | 1.08 | 1.05 | 1.03 | 1.02 | 1.00 |
| 36 | 1.52 | 1.42 | 1.34 | 1.28 | 1.23 | 1.19 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 |
| 37 | 1.54 | 1.44 | 1.36 | 1.30 | 1.25 | 1.20 | 1.17 | 1.13 | 1.11 | 1.08 | 1.06 | 1.05 | 1.03 |
| 38 | 1.55 | 1.46 | 1.38 | 1.31 | 1.26 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.04 |
| 39 | 1.57 | 1.47 | 1.39 | 1.33 | 1.27 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.05 |
| 40 | 1.58 | 1.48 | 1.40 | 1.34 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.08 | 1.06 |
| 41 | 1.60 | 1.50 | 1.42 | 1.35 | 1.30 | 1.25 | 1.21 | 1.18 | 1.15 | 1.13 | 1.10 | 1.09 | 1.07 |
| 42 | 1.61 | 1.51 | 1.42 | 1.36 | 1.30 | 1.26 | 1.22 | 1.19 | 1.16 | 1.13 | 1.11 | 1.09 | 1.08 |
| 43 | 1.62 | 1.51 | 1.43 | 1.37 | 1.31 | 1.27 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.08 |
| 44 | | 1.52 | 1.44 | 1.37 | 1.32 | 1.27 | 1.23 | 1.20 | 1.17 | 1.15 | 1.12 | 1.10 | 1.09 |
| 45 | | | 1.45 | 1.38 | 1.33 | 1.28 | 1.24 | 1.21 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 |
| 46 | | | | 1.39 | 1.33 | 1.28 | 1.24 | 1.21 | 1.18 | 1.16 | 1.13 | 1.12 | 1.10 |
| 47 | | | | | 1.34 | 1.29 | 1.25 | 1.22 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 |
| 48 | | | | | | 1.29 | 1.25 | 1.22 | 1.19 | 1.16 | 1.14 | 1.12 | 1.11 |
| 49 | | | | | | | 1.26 | 1.22 | 1.19 | 1.17 | 1.15 | 1.13 | 1.11 |
| 50 | | | | | | | | 1.23 | 1.20 | 1.17 | 1.15 | 1.13 | 1.11 |
| 51 | | | | | | | | | 1.20 | 1.17 | 1.15 | 1.13 | 1.12 |
| 52 | | | | | | | | | | 1.18 | 1.16 | 1.14 | 1.12 |
| 53 | | | | | | | | | | | 1.16 | 1.14 | 1.12 |
| 54 | | | | | | | | | | | | 1.14 | 1.12 |
| 55 | | | | | | | | | | | | | 1.13 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 20.32 cm (tree length).

Shaded area represents 95% confidence interval for predicted diameters in each height class (see Appendix 3).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.

Table 12. Factors for Calculating Hardwood Species Merchantable Volume (m³/ha) ⁽¹⁾

| Species * | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|----------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| S.Maple | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| R.Maple | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Y.Birch | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| W.Birch | 1.08 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 |
| R.Oak | 1.09 | 1.09 | 1.08 | 1.08 | 1.07 | 1.07 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| T.Aspen | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 |

(1) Based on gross merchantable volume (solid wood, inside bark) of all trees 9.1 cm dbh and greater with 0.15 m stump and top dib 7.62 cm (tree length). To obtain Species Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table 13. Factors for Calculating Hardwood Species Shortwood Volume (m³/ha) ⁽²⁾

| Species * | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|----------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| S.Maple | 0.78 | 0.83 | 0.86 | 0.89 | 0.90 | 0.92 | 0.93 | 0.94 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 0.96 | 0.96 |
| R.Maple | 0.78 | 0.83 | 0.86 | 0.89 | 0.90 | 0.92 | 0.93 | 0.94 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 0.96 | 0.96 |
| Y.Birch | 0.72 | 0.78 | 0.81 | 0.84 | 0.86 | 0.88 | 0.89 | 0.90 | 0.91 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 |
| W.Birch | 0.81 | 0.86 | 0.89 | 0.92 | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 |
| R.Oak | 0.86 | 0.90 | 0.94 | 0.96 | 0.97 | 0.98 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.99 |
| T.Aspen | 0.75 | 0.81 | 0.85 | 0.88 | 0.91 | 0.93 | 0.95 | 0.97 | 0.99 | 1.00 | 1.02 | 1.03 | 1.04 | 1.06 | 1.07 |
| H.Wood | 0.78 | 0.83 | 0.86 | 0.89 | 0.90 | 0.92 | 0.93 | 0.94 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 0.96 | 0.96 |

(2) Based on gross merchantable volume (solid wood, inside bark) of all trees 9.1 cm dbh and greater with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height. To obtain Species Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table 14. Factors for Calculating Hardwood Species Sawlog Volume (m³/ha) ⁽³⁾

| Species * | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|----------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| S.Maple | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| R.Maple | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Y.Birch | 1.03 | 1.02 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 |
| W.Birch | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 |
| R.Oak | 1.07 | 1.07 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| T.Aspen | 1.00 | 1.01 | 1.02 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 | 1.13 |

(3) Based on gross sawlog volume (solid wood, inside bark) of all trees 21.1 cm dbh and greater with 0.15 m stump and top dib 20.32 cm (tree length). To obtain Species Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.

* Species: S.Maple = Sugar Maple, R.Maple = Red Maple, Y.Birch = Yellow Birch, W.Birch = White Birch, R.Oak = Red Oak, T.Aspen = Trembling Aspen, H.Wood = generic hardwood.

DISCUSSION

Softwoods

For merchantable softwood, there is relatively little volume difference as a result of variation in diameter for a given height class (Table 2 shaded area). As a result, volume estimates based only on average height and stand basal area measurements (Table 1) should be representative in most cases. In stands 13 m or greater in height, volume estimates should generally be within 10% of estimates obtained using both height and diameter measurements. In stands less than 13 m in height, dbh variation becomes more important. Volumes can be overestimated by up to 30% in the shorter height classes if only average stand height is measured. Accurate volume estimates in stands less than 13 m requires dbh measurements, especially if average diameters are low.

Similar trends are evident for softwood sawlogs (Table 4 shaded area). Volume estimates based on average height and stand basal area measurements (Table 3) should be representative when the average height of sawlog size trees is 15 m or more. Confidence in volume estimates decreases when average height drops below 15 m. Again, this is most apparent at lower height and dbh classes, where volumes can be overestimated by 15% or more if diameter measurements are not taken.

Merchantable volume estimates in Table 1 assume tree-length harvesting of softwoods with average taper, a 15 cm stump, and a 7.62 cm (3 inch) top. Volume estimates can vary, however, according to species, harvesting system, or changes in stump height and top diameter limit.

Differences in estimated volume due to species tend to be low, generally less than 10% (Table 5). Only with red spruce are volumes consistently underestimated using Table 1, especially in shorter height classes. This is due to the less than average taper of red spruce. Shortwood harvesting (cutting 2.44 m sections from the merchantable length of the tree) has a greater impact on volume estimates than does species alone (assuming no short pieces are utilized). Differences are greatest in shorter height classes since the relative importance of lost top-wood is also greatest in these classes (Table 6). With respect to Table 1, shortwood harvesting of white spruce gives the lowest volumes (as much as 19% less), while red spruce is the least affected species.

Adjustments in sawlog volume due to species (Table 7) are less variable than for merchantable volume. Of note, however, is the 10% to 6% increase in red spruce volume (with respect to Table 3) in the 12 m to 17 m height classes.

Merchantable and sawlog volume estimates corrected for species and/or harvesting method could still be inaccurate if diameter versus height class assumptions in Tables 1 and 3 are not representative of the stand being measured. See Appendix 5 for correction factors incorporating species, harvesting method, and diameter class (for both softwoods and hardwoods).

Changes in volume due to changes in stump height or top diameter limit depend on the combination of values chosen. Intuitively, cutting to a lower stump height and/or to a smaller top diameter will result in more volume, with relative increases being most evident in the shorter height classes. Volume correction factors based on different combinations of stump height and top diameter limit are too numerous to list in this report. To estimate volumes using various stump heights and diameter limits, use the Product Cruise program (NSDNR 1996b).

Hardwoods

For merchantable hardwood, there is slightly more volume variation within height classes for different diameters than was the case for softwood (Table 9 shaded area). This reflects greater variability in hardwood diameter versus height relationships. As with softwoods however, the lower the average stand height, the more important diameter measurements become in accurately estimating volume. Merchantable volume based on average height (without dbh measurements) can be overestimated by 30% or more in shorter height classes (Tables 8 and 9). Only in the 15 m height class and above would volume estimates based on height be within 10% (on average) of estimates based on both height and diameter measurements.

For hardwood sawlogs, volume variation within the dbh confidence interval is high for all height classes (Table 11 shaded area). This is because dbh versus height relationships are poor for hardwood sawlogs of the size necessary to produce a 20.32 cm (8 inch) top diameter. Average tree heights tend to level off while diameters tend to increase over time. As a result, hardwood sawlog volume estimates require dbh measurements for reasonable accuracy.

Adjustments for species and shortwood harvesting show similar trends for hardwoods as for softwoods (Tables 12 and 13). Differences due to species alone tend to be less than 10%, and shortwood harvesting has the greatest impact in shorter height classes (as much as 28% lower for yellow birch).

Adjustments in sawlog volumes due to species (Table 14) also tend to be low (generally less than 10%). This shows that diameter measurements are more important than species with respect to accurate estimates of hardwood sawlog volume.

Other Factors

Per hectare volumes shown in (or derived from) Tables 1-14 are only estimates of merchantable, shortwood, or sawlog volumes. On a site by site basis, actual volumes may differ from those listed for two main reasons:

1. Accuracy of volume functions used.

Volume functions given in Honer et al. (1983) were based on actual tree measurements, but cannot account for all variation found in tree form. For example, accuracy in total volume estimates vary between (+/-) 13.6 % for red spruce and (+/-) 34.3% for yellow birch. Accuracy is somewhat further reduced when estimating merchantable and sawlog volumes.

2. Volume estimates are gross estimates. No reduction is included for harvest residue or scalable defects.

Trees not cut, trees felled and left, and wood lost or broken during harvest can reduce merchantable volume by several percent. For example, Snow and Eddy (1982) reported an average of 8% logging residue on 89 clear-cuts surveyed in the late 1970s.

Rot can also reduce merchantable volume estimates. A 1995 survey of 215 balsam fir trees (average age about 43 years) showed 47% with some form of decay and 30% with soft rot which reduced potential merchantable volume by almost 4% (NSDNR 1997).

Stem quality defects (e.g. sweep, forks, internal rot, insect damage) may lead to reductions in sawlog volumes. Some of this sawlog cull can still be counted, however, as merchantable volume for other products.

Finally, it should be noted that diameter-independent volume tables listed in this report are for unmanaged stands. Diameter versus height relationships for trees in managed stands (plantations or thinned stands) could be different than those used to generate Tables 1, 3, 8, and 10. While these relationships can be estimated or corrected for, tree taper values inherent to volume functions used may not apply. Additional research is required to determine if changes in taper for managed trees would require modification to species volume functions.

SUMMARY

This report contains Tables that can be used to estimate per hectare softwood and hardwood volumes at different levels of confidence. Where accuracy requirements can be relaxed, volumes can be estimated using only height and stand basal area measurements. More accurate estimates can be obtained by applying correction factors which make adjustments for diameter class, species, and/or harvesting method. Users of these tables should be aware of their applicability and accuracy under different stand conditions. Where more detailed cruise information is required, the Product Cruise program (NSDNR 1996b) could be used in place of these Tables.

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Appendix 1

Describing the Tree of Average Basal Area

Quadratic Mean Diameter

The diameter of the tree of average basal area is referred to as the quadratic mean diameter.

1. To calculate the quadratic mean diameter (qdbh) for trees in fixed-area plots: (i) square the dbh value of each tree and add them together, (ii) divide by the number of trees measured, (iii) calculate the square root of this average value.

Example 1: Merchantable and sawlog qdbh for fixed-area plots.

| All Plots (diameter in cm) | | | | |
|----------------------------|---------------|----------------------------|---------------|----------------------------|
| Count | Merch. dbh | Merch. dbh ² | Sawlog dbh | Sawlog dbh ² |
| 1 | 12.2 | 148.8 | 18.3 | 334.9 |
| 2 | 10.5 | 110.3 | 20.2 | 408.0 |
| 3 | 13.2 | 174.2 | 23.4 | 547.6 |
| 4 | 11.2 | 125.4 | 16.1 | 259.2 |
| 5 | 9.6 | 92.2 | 15.6 | 243.4 |
| 6 | 9.9 | 98.0 | 17.8 | 316.8 |
| 7 | 13.6 | 185.0 | 22.1 | 488.4 |
| 8 | 12.5 | 156.3 | 16.3 | 265.7 |
| 9 | 15.2 | 231.0 | 14.6 | 213.2 |
| 10 | 14.6 | 213.2 | 18.7 | 349.7 |
| 11 | 11.0 | 121.0 | 19.3 | 372.5 |
| 12 | 10.7 | 114.5 | 14.6 | 213.2 |
| 13 | 13.6 | 185.0 | 18.4 | 338.6 |
| 14 | 9.2 | 84.6 | 17.6 | 309.8 |
| 15 | 9.6 | 92.2 | 23.6 | 557.0 |
| 16 | 9.5 | 90.3 | | |
| 17 | 10.2 | 104.0 | | |
| 18 | 11.5 | 132.3 | | |
| 19 | 13.2 | 174.2 | | |
| 20 | 12.9 | 166.4 | | |
| 21 | 14.0 | 196.0 | | |
| Sum | | 2994.8 | | 5217.8 |
| Mean | | 142.6 | | 347.9 |
| Sq. Root of Mean | | 11.9 | | 18.7 |

2. For prism points, calculation of qdbh must take tree factors into account. The number of trees per hectare represented by each tree tallied in a prism sweep varies by tree diameter. Smaller trees tallied represent more trees per hectare than do larger trees. In order to determine quadratic mean diameter, it is necessary to first calculate the mean tree basal area for the stand as a whole. The diameter associated with this mean tree basal area is then equal to the quadratic mean diameter (Husch et al. 1982).

Example 2: Tally from 3 prism points using BAF 2 prism. Tree Factor represents stems per hectare (spha) associated with each tree tallied (based on individual tree size).

| Tree Number | Merch. dbh (cm) | Tree Factor (spha) | | Tree Number | Sawlog dbh (cm) | Tree Factor (spha) |
|-------------|-----------------|--------------------|--|-------------|-----------------|--------------------|
| 1 | 11.2 | 203 | | 1 | 42.0 | 14 |
| 2 | 9.6 | 276 | | 2 | 36.7 | 19 |
| 3 | 9.9 | 260 | | 3 | 29.1 | 30 |
| 4 | 13.6 | 138 | | 4 | 15.4 | 107 |
| 5 | 9.6 | 276 | | 5 | 21.2 | 57 |
| 6 | 11.3 | 199 | | 6 | 16.3 | 96 |
| 7 | 10.5 | 231 | | 7 | 24.6 | 42 |
| 8 | 12.5 | 163 | | 8 | 18.6 | 74 |
| 9 | 12.8 | 155 | | 9 | 20.1 | 63 |
| 10 | 9.6 | 276 | | 10 | 17.5 | 83 |
| 11 | 13.9 | 132 | | 11 | 16.0 | 99 |
| 12 | 15.2 | 110 | | 12 | 17.9 | 79 |
| 13 | 10.3 | 240 | | 13 | 18.6 | 74 |
| 14 | 12.6 | 160 | | 14 | 25.6 | 39 |
| 15 | 9.8 | 265 | | 15 | 18.9 | 71 |
| 16 | 16.3 | 96 | | 16 | 19.6 | 66 |
| 17 | 14.5 | 121 | | 17 | 30.1 | 28 |
| 18 | 12.8 | 155 | | 18 | 22.5 | 50 |
| 19 | 11.6 | 189 | | | | |
| 20 | 15.6 | 105 | | | | |
| 21 | 10.9 | 214 | | | | |
| 22 | 13.2 | 146 | | | | |
| 23 | 11.0 | 210 | | | | |
| 24 | 9.8 | 265 | | | | |
| 25 | 13.4 | 142 | | | | |
| 26 | 18.2 | 77 | | | | |
| 27 | 12.3 | 168 | | | | |
| 28 | 17.0 | 88 | | | | |
| 29 | 15.6 | 105 | | | | |
| | Sum | 5168 | | | Sum | 1093 |

Main Equations:

$$\begin{aligned}\text{Tree Factor (spha)} &= (\text{Prism BAF}) \div (\text{dbh}^2 * 0.00007854) \\ \text{qdbh} &= \text{sq. root (BA} \div 0.00007854)\end{aligned}$$

Sample Calculations (merchantable qdbh):

$$\begin{aligned}\text{Merch. BA/ha} &= (\text{Merch. Tree Count}) * (\text{Prism BAF}) \div (\# \text{ Plots}) \\ &= 29 * 2 \div 3 \\ &= 19.33 \text{ m}^2/\text{ha}\end{aligned}$$

$$\begin{aligned}\text{Merch. Stems/ha} &= (\text{Sum Merch. Stems/ha}) \div (\# \text{ Plots}) \\ &= 5168 \div 3 \\ &= 1723 \text{ spha}\end{aligned}$$

$$\begin{aligned}\text{Merch. Mean Tree BA} &= (\text{Merch. BA/ha}) \div (\text{Merch. Stems/ha}) \\ &= (19.33 \text{ m}^2/\text{ha}) \div (1723 \text{ spha}) \\ &= 0.0112 \text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Merch. qdbh} &= \text{sq. root (0.0112} \div 0.00007854) \\ &= 11.9 \text{ cm}\end{aligned}$$

Sample Calculations (sawlog qdbh):

$$\begin{aligned}\text{Sawlog BA/ha} &= (\text{Sawlog Tree Count}) * (\text{Prism BAF}) \div (\# \text{ Plots}) \\ &= 18 * 2 \div 3 \\ &= 12.00 \text{ m}^2/\text{ha}\end{aligned}$$

$$\begin{aligned}\text{Sawlog Stems/ha} &= (\text{Sum Sawlog Stems/ha}) \div (\# \text{ Plots}) \\ &= 1093 \div 3 \\ &= 364 \text{ spha}\end{aligned}$$

$$\begin{aligned}\text{Sawlog Mean Tree BA} &= (\text{Sawlog BA/ha}) \div (\text{Sawlog Stems/ha}) \\ &= (12.00 \text{ m}^2/\text{ha}) \div (364 \text{ spha}) \\ &= 0.0330 \text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Sawlog qdbh} &= \text{sq. root (0.0330} \div 0.00007854) \\ &= 20.5 \text{ cm}\end{aligned}$$

Lorey's Height

Lorey's height is average tree height weighted by basal area (Husch et al. 1982).

Lorey's height can be estimated directly by taking the arithmetic average height of all trees contained in a prism sweep (this is the case because horizontal point sampling selects trees with probability proportional to basal area). However, it is usually impractical to measure the height of every tree in a plot. Alternatively, Lorey's height can be estimated by averaging the height measurements of representative co-dominate trees in each product class. This applies to both prism plots and fixed area plots.

Appendix 2

Details of Methods Used to Generate Volume Tables

Volume Calculations

For both softwoods and hardwoods, values were calculated for total volume, merchantable tree-length volume, merchantable shortwood volume (2.44 m lengths), and sawlog volume using several combinations of height class and diameter. In all cases, volumes were based on assumed total Lorey's height (m) and quadratic mean diameter (cm). Volumes were calculated for red spruce, balsam fir, white spruce, black spruce, red pine, white pine, hemlock, red and sugar maple, yellow birch, white birch, red oak, and trembling aspen.

Total tree volumes were calculated using Equation 14 in Honer et al. (1983). Species-specific coefficients were used in all cases except for red and sugar maple which were grouped under maple.

Merchantable and sawlog tree volumes were calculated using the adjusted squared diameter ratio method (Equation 22, Honer et al. 1983). For these calculations, species-specific coefficients were used except for hemlock, maple, red oak, and trembling aspen where specific coefficients did not exist. In these cases, coefficients associated with softwoods or hardwoods were used. For both softwood and hardwood merchantable volume calculations, stump height was assumed to be 0.15 m (6 inches) and top diameter 7.62 cm (3 inches) inside bark. For softwood sawlogs, stump height was assumed to be 0.15 m and top diameter 10.16 cm (4 inches) inside bark. For hardwood sawlogs, stump height was assumed to be 0.15 m and top diameter 20.32 cm (8 inches) inside bark.

Shortwood tree volume calculations were based on merchantable height minus a 1.22 m (4 ft.) top. This deduction was assumed to represent an average maximum loss of merchantable wood due to shortwood versus tree-length harvesting in each height class. Merchantable heights were estimated using Equation 18 in Honer et al. (1983) and solving for height (using previously calculated merchantable volumes). Species-specific coefficients were used in all calculations except for hemlock, maple, red oak, and trembling aspen where softwood or hardwood coefficients were used. After reducing estimated merchantable heights by 1.22 m, new merchantable tree volumes were calculated using the height ratio method (Equation 18).

Volume Tables

Individual species Volume Tables were produced based on: (i) calculated merchantable tree volume to merchantable tree basal area ratios, (ii) stand basal area values, (iii) total Lorey's height values, and (iv) average diameter versus height relationships for merchantable and sawlog size trees.

Average diameters for stands of given average heights were estimated using provincial Forest Inventory Plot (FIP) data. Data from more than 47,000 trees were analyzed and grouped into merchantable softwood (dbh \geq 9.1 cm), sawlog softwood (dbh \geq 14.1 cm), merchantable hardwood (dbh \geq 9.1 cm), and sawlog hardwood (dbh \geq 21.1 cm) classes. Derived values are listed below.

Correction factor tables for species, shortwood, and diameter class were generated for each stand basal area versus height class combination by calculating actual volumes for each case, and dividing these values by corresponding volumes based on average diameter versus height relationships for softwoods and hardwoods (Tables 1, 3, 8, and 10). This allows Tables 1, 3, 8, and 10 to be used as the basis for all volume estimates, regardless of whether correction factors are used or not.

Merchantable
Softwood

| Height (m) | DBH (cm) |
|---------------|-------------|
| 8 | 13.4 |
| 9 | 14.4 |
| 10 | 15.4 |
| 11 | 16.4 |
| 12 | 17.6 |
| 13 | 18.8 |
| 14 | 20.1 |
| 15 | 21.5 |
| 16 | 23.0 |
| 17 | 24.6 |
| 18 | 26.3 |
| 19 | 28.1 |
| 20 | 30.0 |
| 21 | 32.1 |
| 22 | 34.3 |

Merchantable
Hardwood

| Height (m) | DBH (cm) |
|---------------|-------------|
| 8 | 12.8 |
| 9 | 13.6 |
| 10 | 14.5 |
| 11 | 15.5 |
| 12 | 16.5 |
| 13 | 17.6 |
| 14 | 18.8 |
| 15 | 20.1 |
| 16 | 21.4 |
| 17 | 22.8 |
| 18 | 24.4 |
| 19 | 26.0 |
| 20 | 27.7 |
| 21 | 29.5 |
| 22 | 31.5 |

Sawlog
Softwood

| Height (m) | DBH (cm) |
|---------------|-------------|
| 12 | 20.4 |
| 13 | 21.5 |
| 14 | 22.7 |
| 15 | 23.9 |
| 16 | 25.2 |
| 17 | 26.6 |
| 18 | 28.0 |
| 19 | 29.5 |
| 20 | 31.1 |
| 21 | 32.8 |
| 22 | 34.5 |
| 23 | 36.4 |
| 24 | 38.3 |

Sawlog
Hardwood

| Height (m) | DBH (cm) |
|---------------|-------------|
| 12 | 25.8 |
| 13 | 26.5 |
| 14 | 27.2 |
| 15 | 27.8 |
| 16 | 28.6 |
| 17 | 29.3 |
| 18 | 30.0 |
| 19 | 30.8 |
| 20 | 31.6 |
| 21 | 32.4 |
| 22 | 33.2 |
| 23 | 34.1 |
| 24 | 34.9 |

Sample Calculations (Red Spruce)

| | |
|--------|---|
| QDBH = | Quadratic mean diameter outside bark (cm) |
| HTM | = Total Lorey's tree height of merchantable trees (m) |
| HTS | = Total Lorey's tree height of sawlog size trees (m) |
| TDLM = | Top diameter limit merchantable: 7.62 cm |
| TDLS | = Top diameter limit sawlog: 10.16 cm |
| STHT | = Stump height: 0.15 m |

| | | | | |
|----|---|-------------------------|-----------|--------------|
| B2 | = | Regression coefficient= | 0.169 | (Red Spruce) |
| C1 | = | Regression coefficient= | 1.226 | (Red Spruce) |
| C2 | = | Regression coefficient= | 315.832 | (Red Spruce) |
| R1 | = | Regression coefficient | = 0.9644 | (Red Spruce) |
| R2 | = | Regression coefficient | = -0.0995 | (Red Spruce) |
| R3 | = | Regression coefficient | = -0.7658 | (Red Spruce) |
| P2 | = | Regression coefficient | = 2.1149 | (Red Spruce) |
| P3 | = | Regression coefficient | = -1.1465 | (Red Spruce) |

(A) Total Volume of merchantable (VTm) and sawlog (VTs) size trees in m³
(Equation 14: Honer et al. 1983).

$$VTm = (0.0043891 * QDBH^2) * (1 - 0.04365 * B2)^2 / (C1 + (0.3048 * C2 / HTM))$$

and

$$VTs = (0.0043891 * QDBH^2) * (1 - 0.04365 * B2)^2 / (C1 + (0.3048 * C2 / HTS))$$

(B) Merchantable Volume (VM) in m³ (Equation 22: Honer et al. 1983).

$$VM = VTm * (R1 + (R2 * X) + (R3 * X^2))$$

$$X = TDLM^2 / QDBH^2 * (1 - 0.04365 * B2)^{-2} * (1 + STHT / HTM)$$

(C) Sawlog Volume (VS) in m³ (Equation 22: Honer et al. 1983).

$$VS = VTs * (R1 + (R2 * X) + (R3 * X^2))$$

$$X = TDLS^2 / QDBH^2 * (1 - 0.04365 * B2)^{-2} * (1 + STHT / HTS)$$

(D) Merchantable Height (MH) in metres (Equation 18 : Honer et al. 1983 solved for MH).

$$MH = [-P2 / HTM + \{(P2 / HTM)^2 - 4 * P3 / HTM^2 * (-VM / VTm - P2 * STHT / HTM - P3 * STHT^2 / HTM^2)\}^{0.5}] / (2 * P3 / HTM^2)$$

(E) Shortwood Merchantable Height (SH) in metres.

$$SH = MH - (4ft. * 0.3048 m/ft.)$$

(F) Shortwood Merchantable Volume (VSH) in m³ (Equation 18: Honer et al. 1983).

$$VSH = VT * (P2 * ((SH / HTM) - (STHT / HTM)) + P3 * ((SH / HTM)^2 - (STHT / HTM)^2))$$

Appendix 3

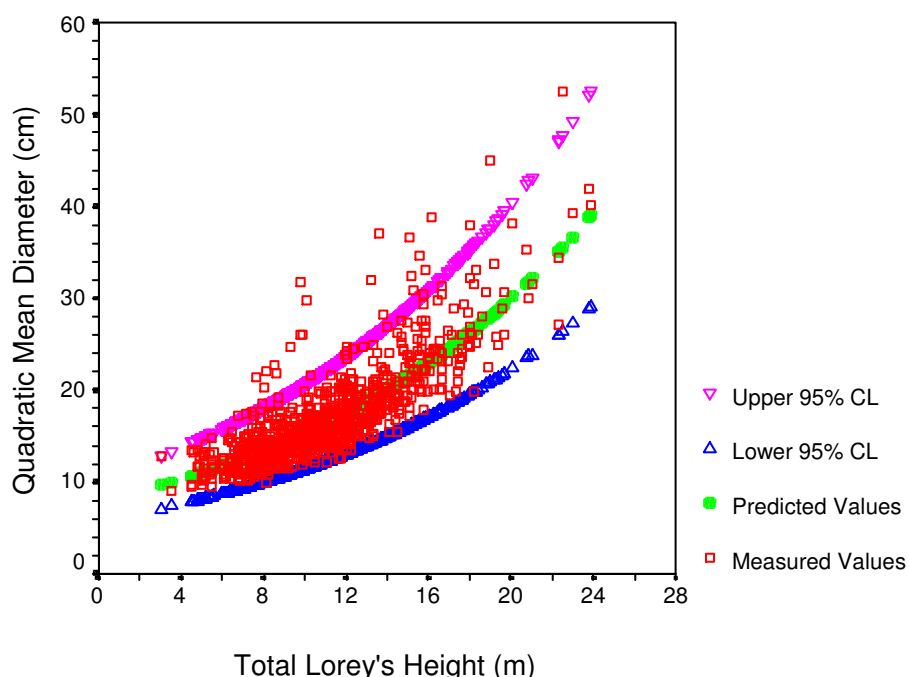
Diameter Versus Height Relationships Derived From Inventory Data

| | | |
|------------------------|--|---------------|
| Merchantable Softwood: | $qdbh = e^{(2.0603 + 0.0671 * lorht)}$ | $r^2 = 0.702$ |
| Merchantable Hardwood: | $qdbh = e^{(2.0334 + 0.0644 * lorht)}$ | $r^2 = 0.610$ |
| Softwood Sawlog: | $qdbh = e^{(2.3887 + 0.0524 * lorht)}$ | $r^2 = 0.581$ |
| Hardwood Sawlog: | $qdbh = e^{(2.9488 + 0.0252 * lorht)}$ | $r^2 = 0.186$ |

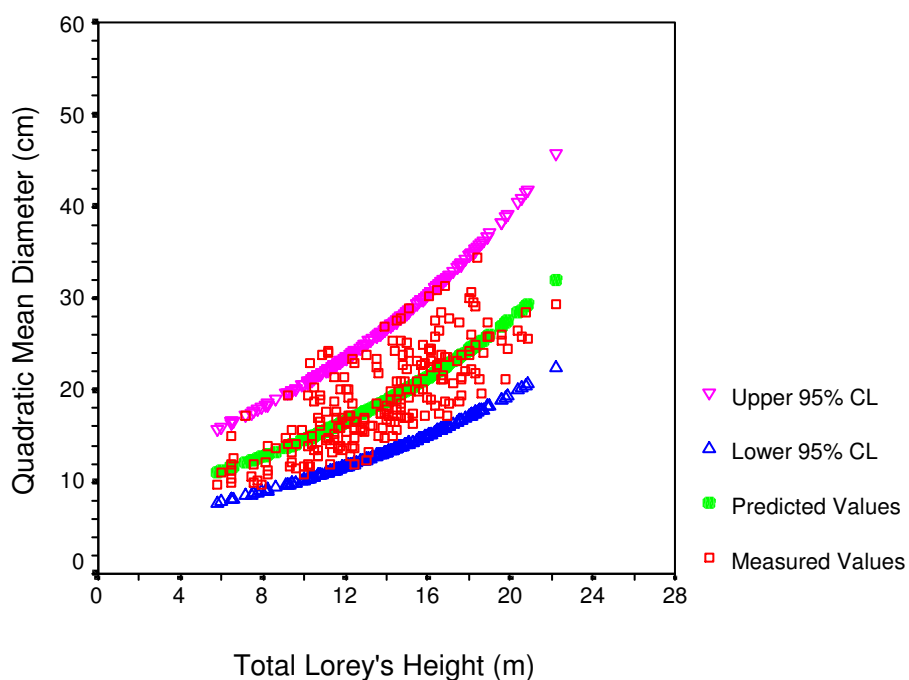
Where qdbh = quadratic mean diameter (cm) and lorht = total Lorey's height (m).

See the following graphs for data range, regression curves, and 95% confidence intervals. Confidence intervals shown correspond to shaded areas in Tables 2, 4, 9, and 11.

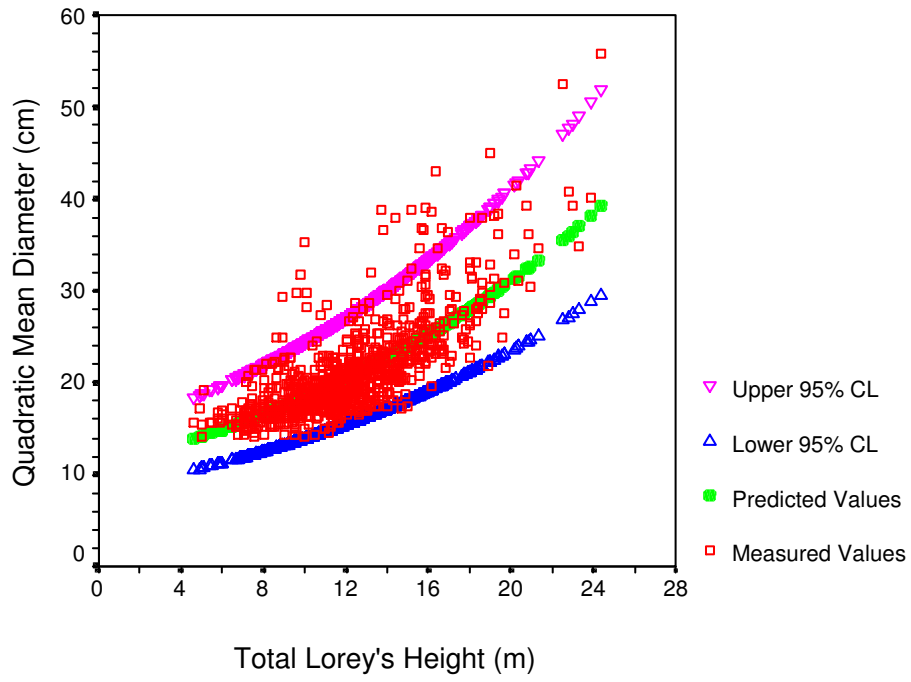
Merchantable Softwood



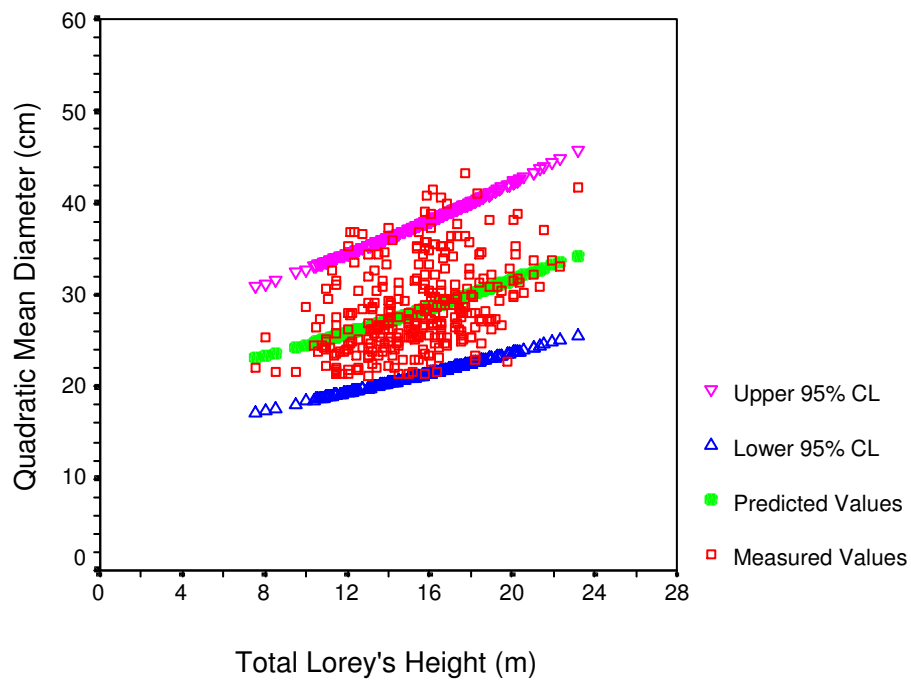
Merchantable Hardwood



Sawlog Softwood



Sawlog Hardwood



Appendix 4

Volume and Area Conversion Factors ⁽¹⁾

| | | | | |
|--------------------|---|---------|---|-------------|
| m ³ | x | 35.3145 | = | cu.ft. |
| ha | x | 2.4710 | = | acre |
| m ³ /ha | x | 14.2913 | = | cu.ft./acre |
| m ³ | ÷ | 2.322 | = | Cord (Swd) |
| m ³ | ÷ | 1.926 | = | Cord (Hwd) |
| m ³ | ÷ | 5.663 | = | Mfbm (Swd) |
| m ³ | ÷ | 5.663 | = | Mfbm (Hwd) |
| m ³ | ÷ | 1.167 | = | Tonne (Swd) |
| m ³ | ÷ | 0.963 | = | Tonne (Hwd) |
| m ³ | ÷ | 1.0587 | = | Ton (Swd) |
| m ³ | ÷ | 0.8736 | = | Ton (Hwd) |

(1) Derived from: Registry of Buyers 2000 Calendar Year Report (NSDNR Report FOR 2001-1).

Appendix 5A

Softwood Species Diameter Correction Factors

Following are Tables containing species-specific diameter class correction factors for merchantable volume, shortwood volume, and sawlog volume. Tables are presented in the order of:

Red Spruce
Balsam Fir
White Spruce
Black Spruce
Red Pine
White Pine
Hemlock

Table A5-1. Factors for Calculating Red Spruce Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.85 | 0.82 | 0.79 | 0.77 | 0.76 | 0.74 | 0.73 | 0.72 | 0.71 | 0.71 | 0.70 | 0.69 | 0.69 | 0.68 | 0.68 |
| 11 | 0.98 | 0.94 | 0.91 | 0.89 | 0.87 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 | 0.78 |
| 12 | 1.07 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.85 | 0.85 |
| 13 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 |
| 14 | 1.16 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 |
| 15 | 1.19 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.94 |
| 16 | 1.21 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 17 | 1.23 | 1.18 | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 |
| 18 | 1.24 | 1.19 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 |
| 19 | 1.25 | 1.20 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 |
| 20 | 1.26 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 |
| 21 | 1.27 | 1.21 | 1.18 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 |
| 22 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 |
| 23 | 1.27 | 1.22 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 |
| 24 | 1.28 | 1.23 | 1.19 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 |
| 25 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 |
| 26 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 |
| 27 | 1.28 | 1.23 | 1.19 | 1.16 | 1.14 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 |
| 28 | 1.29 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 |
| 29 | 1.29 | 1.24 | 1.20 | 1.16 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 |
| 30 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 31 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 32 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 33 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 |
| 34 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 |
| 35 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.02 |
| 36 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.05 | 1.05 | 1.04 | 1.03 | 1.02 |
| 37 | | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 38 | | | 1.20 | 1.17 | 1.15 | 1.12 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 39 | | | | 1.17 | 1.15 | 1.12 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 40 | | | | | 1.15 | 1.12 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 41 | | | | | | 1.12 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 42 | | | | | | | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 43 | | | | | | | | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 44 | | | | | | | | | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 |
| 45 | | | | | | | | | | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 |
| 46 | | | | | | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 |
| 47 | | | | | | | | | | | | 1.05 | 1.04 | 1.03 | 1.03 |
| 48 | | | | | | | | | | | | | 1.04 | 1.03 | 1.03 |
| 49 | | | | | | | | | | | | | | 1.03 | 1.03 |
| 50 | | | | | | | | | | | | | | | 1.03 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-2. Factors for Calculating Red Spruce Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.57 | 0.58 | 0.59 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| 11 | 0.74 | 0.74 | 0.74 | 0.74 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| 12 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 | 0.81 | 0.81 | 0.81 | 0.80 | 0.80 | 0.80 | 0.79 | 0.79 |
| 13 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.85 | 0.84 |
| 14 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 |
| 15 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 |
| 16 | 1.09 | 1.06 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 |
| 17 | 1.12 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
| 18 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 19 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 20 | 1.20 | 1.15 | 1.11 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 |
| 21 | | 1.16 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 |
| 22 | | 1.19 | 1.14 | 1.11 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 |
| 23 | | | 1.15 | 1.12 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 |
| 24 | | | | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 |
| 25 | | | | | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 |
| 26 | | | | | | 1.09 | 1.07 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 |
| 27 | | | | | | | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 |
| 28 | | | | | | | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 |
| 29 | | | | | | | | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 |
| 30 | | | | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 |
| 31 | | | | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 |
| 32 | | | | | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 |
| 33 | | | | | | | | | | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 |
| 34 | | | | | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 |
| 35 | | | | | | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 |
| 36 | | | | | | | | | | | | 1.04 | 1.03 | 1.02 | 1.01 |
| 37 | | | | | | | | | | | | 1.04 | 1.03 | 1.02 | 1.01 |
| 38 | | | | | | | | | | | | | 1.03 | 1.02 | 1.01 |
| 39 | | | | | | | | | | | | | 1.03 | 1.02 | 1.01 |
| 40 | | | | | | | | | | | | | | 1.02 | 1.02 |
| 41 | | | | | | | | | | | | | | 1.02 | 1.02 |
| 42 | | | | | | | | | | | | | | 1.03 | 1.02 |
| 43 | | | | | | | | | | | | | | | 1.02 |
| 44 | | | | | | | | | | | | | | | 1.02 |
| 45 | | | | | | | | | | | | | | | 1.02 |
| 46 | | | | | | | | | | | | | | | |
| 47 | | | | | | | | | | | | | | | |
| 48 | | | | | | | | | | | | | | | |
| 49 | | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | | |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-3. Factors for Calculating Red Spruce Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.85 | 0.85 |
| 17 | 1.02 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 |
| 18 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 19 | 1.08 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 |
| 20 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.94 |
| 21 | 1.11 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 |
| 22 | 1.12 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 |
| 23 | 1.13 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 |
| 24 | 1.14 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 |
| 25 | 1.15 | 1.12 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 |
| 26 | 1.15 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 |
| 27 | 1.16 | 1.13 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 |
| 28 | 1.16 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 |
| 29 | 1.17 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.00 |
| 30 | 1.17 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 |
| 31 | 1.17 | 1.15 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 |
| 32 | 1.17 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 |
| 33 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 |
| 34 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.01 |
| 35 | 1.18 | 1.15 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 |
| 36 | 1.18 | 1.15 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 |
| 37 | 1.18 | 1.16 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 |
| 38 | 1.18 | 1.16 | 1.13 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 |
| 39 | 1.18 | 1.16 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 |
| 40 | 1.18 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 |
| 41 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 42 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 43 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 44 | | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 45 | | | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 |
| 46 | | | | 1.12 | 1.10 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 |
| 47 | | | | | 1.10 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 |
| 48 | | | | | | 1.09 | 1.08 | 1.07 | 1.05 | 1.05 | 1.04 | 1.03 | 1.02 |
| 49 | | | | | | | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 50 | | | | | | | | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 51 | | | | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 |
| 52 | | | | | | | | | | 1.05 | 1.04 | 1.03 | 1.02 |
| 53 | | | | | | | | | | | 1.04 | 1.03 | 1.02 |
| 54 | | | | | | | | | | | | 1.03 | 1.02 |
| 55 | | | | | | | | | | | | | 1.02 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table A5-4. Factors for Calculating Balsam Fir Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.81 | 0.78 | 0.75 | 0.72 | 0.70 | 0.69 | 0.67 | 0.66 | 0.65 | 0.63 | 0.63 | 0.62 | 0.61 | 0.60 | 0.59 |
| 11 | 0.94 | 0.90 | 0.86 | 0.83 | 0.81 | 0.79 | 0.77 | 0.76 | 0.74 | 0.73 | 0.72 | 0.71 | 0.70 | 0.69 | 0.68 |
| 12 | 1.02 | 0.98 | 0.94 | 0.91 | 0.88 | 0.86 | 0.84 | 0.82 | 0.81 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 |
| 13 | 1.08 | 1.03 | 0.99 | 0.95 | 0.93 | 0.90 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 |
| 14 | 1.11 | 1.06 | 1.02 | 0.99 | 0.96 | 0.93 | 0.91 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.82 | 0.81 | 0.80 |
| 15 | 1.14 | 1.09 | 1.04 | 1.01 | 0.98 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.84 | 0.83 | 0.82 |
| 16 | 1.16 | 1.10 | 1.06 | 1.02 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 |
| 17 | 1.17 | 1.12 | 1.07 | 1.04 | 1.01 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 18 | 1.18 | 1.13 | 1.08 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.86 | 0.85 |
| 19 | 1.19 | 1.14 | 1.09 | 1.05 | 1.02 | 1.00 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 |
| 20 | 1.20 | 1.14 | 1.10 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.87 | 0.86 |
| 21 | 1.20 | 1.15 | 1.10 | 1.06 | 1.03 | 1.01 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 22 | 1.21 | 1.15 | 1.10 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 23 | 1.21 | 1.15 | 1.11 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 24 | 1.21 | 1.16 | 1.11 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 |
| 25 | 1.22 | 1.16 | 1.11 | 1.07 | 1.04 | 1.02 | 0.99 | 0.97 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 |
| 26 | 1.22 | 1.16 | 1.11 | 1.08 | 1.04 | 1.02 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 |
| 27 | 1.22 | 1.16 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 |
| 28 | 1.22 | 1.16 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 |
| 29 | 1.22 | 1.16 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 |
| 30 | 1.22 | 1.16 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 |
| 31 | 1.22 | 1.16 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 |
| 32 | 1.22 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 |
| 33 | 1.22 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 |
| 34 | 1.23 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 |
| 35 | 1.23 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 36 | 1.23 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 37 | | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 38 | | | 1.12 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 39 | | | | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 40 | | | | | 1.05 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 41 | | | | | | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 42 | | | | | | | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 |
| 43 | | | | | | | | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
| 44 | | | | | | | | | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
| 45 | | | | | | | | | | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
| 46 | | | | | | | | | | | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
| 47 | | | | | | | | | | | | 0.92 | 0.91 | 0.90 | 0.88 |
| 48 | | | | | | | | | | | | | 0.91 | 0.90 | 0.88 |
| 49 | | | | | | | | | | | | | | 0.90 | 0.88 |
| 50 | | | | | | | | | | | | | | | 0.88 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-5. Factors for Calculating Balsam Fir Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.52 | 0.53 | 0.54 | 0.54 | 0.54 | 0.54 | 0.54 | 0.54 | 0.54 | 0.53 | 0.53 | 0.53 | 0.53 | 0.52 | 0.52 |
| 11 | 0.69 | 0.69 | 0.68 | 0.68 | 0.67 | 0.67 | 0.66 | 0.66 | 0.65 | 0.65 | 0.64 | 0.64 | 0.63 | 0.63 | 0.62 |
| 12 | 0.81 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.73 | 0.72 | 0.72 | 0.71 | 0.70 | 0.70 | 0.69 | 0.69 |
| 13 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.79 | 0.78 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.74 | 0.73 |
| 14 | 0.94 | 0.91 | 0.89 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.78 | 0.77 | 0.76 |
| 15 | 0.98 | 0.95 | 0.93 | 0.91 | 0.89 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 |
| 16 | 1.01 | 0.98 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.85 | 0.84 | 0.83 | 0.82 | 0.82 | 0.81 | 0.80 |
| 17 | 1.04 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 |
| 18 | 1.06 | 1.02 | 0.99 | 0.96 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 |
| 19 | 1.07 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 |
| 20 | 1.08 | 1.04 | 1.01 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 |
| 21 | 1.09 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 |
| 22 | 1.10 | 1.06 | 1.02 | 1.00 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 |
| 23 | 1.11 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 |
| 24 | 1.11 | 1.07 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.87 | 0.86 | 0.85 | 0.85 |
| 25 | 1.12 | 1.07 | 1.04 | 1.01 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 26 | 1.12 | 1.08 | 1.04 | 1.01 | 0.99 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 27 | 1.13 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 28 | 1.13 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 29 | 1.13 | 1.08 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 30 | 1.13 | 1.09 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 |
| 31 | 1.14 | 1.09 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 |
| 32 | 1.14 | 1.09 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.87 | 0.86 | 0.86 |
| 33 | 1.14 | 1.09 | 1.05 | 1.02 | 1.00 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 34 | 1.14 | 1.09 | 1.05 | 1.02 | 1.00 | 0.97 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 35 | 1.14 | 1.09 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 36 | 1.14 | 1.09 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 37 | | 1.09 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 38 | | | 1.06 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 39 | | | | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 40 | | | | | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 41 | | | | | | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 42 | | | | | | | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 43 | | | | | | | | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 44 | | | | | | | | | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 45 | | | | | | | | | | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 46 | | | | | | | | | | | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 47 | | | | | | | | | | | | 0.89 | 0.88 | 0.87 | 0.86 |
| 48 | | | | | | | | | | | | | 0.88 | 0.87 | 0.86 |
| 49 | | | | | | | | | | | | | | 0.87 | 0.86 |
| 50 | | | | | | | | | | | | | | | 0.86 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-6. Factors for Calculating Balsam Fir Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.91 | 0.89 | 0.87 | 0.85 | 0.83 | 0.81 | 0.80 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.73 |
| 17 | 0.95 | 0.92 | 0.90 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 |
| 18 | 0.98 | 0.95 | 0.93 | 0.91 | 0.89 | 0.87 | 0.85 | 0.84 | 0.83 | 0.81 | 0.80 | 0.79 | 0.78 |
| 19 | 1.00 | 0.97 | 0.95 | 0.92 | 0.91 | 0.89 | 0.87 | 0.86 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 |
| 20 | 1.02 | 0.99 | 0.96 | 0.94 | 0.92 | 0.90 | 0.89 | 0.87 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 |
| 21 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.84 | 0.83 | 0.82 |
| 22 | 1.04 | 1.01 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.83 |
| 23 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 |
| 24 | 1.06 | 1.03 | 1.00 | 0.98 | 0.95 | 0.94 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.85 | 0.84 |
| 25 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 26 | 1.07 | 1.04 | 1.01 | 0.98 | 0.96 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.87 | 0.86 | 0.85 |
| 27 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.86 | 0.85 |
| 28 | 1.07 | 1.04 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 29 | 1.08 | 1.04 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 |
| 30 | 1.08 | 1.05 | 1.02 | 1.00 | 0.97 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 |
| 31 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 |
| 32 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.87 | 0.86 |
| 33 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.86 |
| 34 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 |
| 35 | 1.09 | 1.05 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 |
| 36 | 1.09 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 37 | 1.09 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 38 | 1.09 | 1.06 | 1.03 | 1.01 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 39 | 1.09 | 1.06 | 1.03 | 1.01 | 0.98 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 40 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 |
| 41 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 42 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 43 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 44 | | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 45 | | | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 46 | | | | 1.01 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 47 | | | | | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 48 | | | | | | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 |
| 49 | | | | | | | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 |
| 50 | | | | | | | | 0.94 | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 |
| 51 | | | | | | | | | 0.92 | 0.91 | 0.90 | 0.88 | 0.87 |
| 52 | | | | | | | | | | 0.91 | 0.90 | 0.88 | 0.87 |
| 53 | | | | | | | | | | | 0.90 | 0.88 | 0.87 |
| 54 | | | | | | | | | | | | 0.88 | 0.87 |
| 55 | | | | | | | | | | | | | 0.87 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table A5-7. Factors for Calculating White Spruce Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.70 | 0.68 | 0.65 | 0.64 | 0.62 | 0.61 | 0.60 | 0.59 | 0.59 | 0.58 | 0.57 | 0.57 | 0.56 | 0.56 | 0.56 |
| 11 | 0.83 | 0.80 | 0.77 | 0.75 | 0.73 | 0.72 | 0.71 | 0.70 | 0.69 | 0.68 | 0.68 | 0.67 | 0.66 | 0.66 | 0.65 |
| 12 | 0.92 | 0.88 | 0.85 | 0.83 | 0.81 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.74 | 0.73 | 0.72 | 0.72 |
| 13 | 0.97 | 0.93 | 0.90 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.78 | 0.77 | 0.76 |
| 14 | 1.02 | 0.98 | 0.94 | 0.92 | 0.90 | 0.88 | 0.87 | 0.85 | 0.84 | 0.83 | 0.82 | 0.82 | 0.81 | 0.80 | 0.80 |
| 15 | 1.05 | 1.00 | 0.97 | 0.95 | 0.92 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 |
| 16 | 1.07 | 1.03 | 0.99 | 0.97 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.84 |
| 17 | 1.09 | 1.04 | 1.01 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.85 |
| 18 | 1.10 | 1.06 | 1.02 | 1.00 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 |
| 19 | 1.11 | 1.07 | 1.03 | 1.01 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 |
| 20 | 1.12 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 |
| 21 | 1.13 | 1.09 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 |
| 22 | 1.14 | 1.09 | 1.05 | 1.03 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 |
| 23 | 1.14 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 |
| 24 | 1.15 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 25 | 1.15 | 1.10 | 1.07 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 26 | 1.15 | 1.11 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 |
| 27 | 1.16 | 1.11 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 28 | 1.16 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 29 | 1.16 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 30 | 1.16 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 31 | 1.17 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 |
| 32 | 1.17 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.91 |
| 33 | 1.17 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 34 | 1.17 | 1.12 | 1.08 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 35 | 1.17 | 1.12 | 1.09 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 36 | 1.17 | 1.12 | 1.09 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 37 | | 1.13 | 1.09 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 38 | | | 1.09 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 39 | | | | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 |
| 40 | | | | | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 |
| 41 | | | | | | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 |
| 42 | | | | | | | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 |
| 43 | | | | | | | | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 |
| 44 | | | | | | | | | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 |
| 45 | | | | | | | | | | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 |
| 46 | | | | | | | | | | | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 |
| 47 | | | | | | | | | | | | 0.94 | 0.94 | 0.93 | 0.92 |
| 48 | | | | | | | | | | | | | 0.94 | 0.93 | 0.92 |
| 49 | | | | | | | | | | | | | | 0.93 | 0.92 |
| 50 | | | | | | | | | | | | | | | 0.92 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-8. Factors for Calculating White Spruce Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.41 | 0.43 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 |
| 11 | 0.58 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 |
| 12 | 0.70 | 0.69 | 0.69 | 0.69 | 0.68 | 0.68 | 0.68 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.66 | 0.66 | 0.66 |
| 13 | 0.78 | 0.77 | 0.76 | 0.75 | 0.75 | 0.74 | 0.74 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 |
| 14 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.78 | 0.77 | 0.77 | 0.76 | 0.76 | 0.76 | 0.75 | 0.75 |
| 15 | 0.89 | 0.87 | 0.86 | 0.84 | 0.83 | 0.82 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 | 0.79 | 0.78 | 0.78 |
| 16 | 0.93 | 0.91 | 0.89 | 0.87 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.82 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 |
| 17 | 0.96 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 |
| 18 | 0.99 | 0.96 | 0.94 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 |
| 19 | 1.01 | 0.98 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 |
| 20 | 1.03 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.85 |
| 21 | 1.05 | 1.01 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 |
| 22 | 1.06 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 |
| 23 | 1.08 | 1.04 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 |
| 24 | | 1.05 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 |
| 25 | | 1.06 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 |
| 26 | | | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 |
| 27 | | | | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 |
| 28 | | | | 1.02 | 0.99 | 0.97 | 0.96 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 |
| 29 | | | | | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 |
| 30 | | | | | | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 |
| 31 | | | | | | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.90 |
| 32 | | | | | | | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 33 | | | | | | | | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 34 | | | | | | | | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 35 | | | | | | | | | 0.96 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 |
| 36 | | | | | | | | | | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 37 | | | | | | | | | | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 38 | | | | | | | | | | | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 39 | | | | | | | | | | | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 40 | | | | | | | | | | | | 0.93 | 0.92 | 0.92 | 0.91 |
| 41 | | | | | | | | | | | | | 0.93 | 0.92 | 0.91 |
| 42 | | | | | | | | | | | | | | 0.93 | 0.92 |
| 43 | | | | | | | | | | | | | | | 0.92 |
| 44 | | | | | | | | | | | | | | | 0.92 |
| 45 | | | | | | | | | | | | | | | 0.91 |
| 46 | | | | | | | | | | | | | | | 0.92 |
| 47 | | | | | | | | | | | | | | | |
| 48 | | | | | | | | | | | | | | | |
| 49 | | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | | |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-9. Factors for Calculating White Spruce Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.84 | 0.82 | 0.81 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.74 | 0.73 | 0.72 | 0.72 |
| 17 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.76 | 0.75 |
| 18 | 0.91 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.79 | 0.78 |
| 19 | 0.94 | 0.92 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 |
| 20 | 0.96 | 0.94 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.82 |
| 21 | 0.98 | 0.95 | 0.94 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 | 0.84 | 0.83 |
| 22 | 0.99 | 0.97 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.85 | 0.84 |
| 23 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.85 |
| 24 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 |
| 25 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 |
| 26 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.87 |
| 27 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 |
| 28 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 | 0.88 |
| 29 | 1.04 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 |
| 30 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 |
| 31 | 1.05 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 |
| 32 | 1.05 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 33 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 34 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 35 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 |
| 36 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 |
| 37 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 38 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 39 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 40 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 41 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 42 | 1.07 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 43 | 1.07 | 1.05 | 1.02 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 |
| 44 | | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 |
| 45 | | | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.91 |
| 46 | | | | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 47 | | | | | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 48 | | | | | | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 49 | | | | | | | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 50 | | | | | | | | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 51 | | | | | | | | | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 52 | | | | | | | | | | 0.94 | 0.93 | 0.92 | 0.92 |
| 53 | | | | | | | | | | | 0.93 | 0.92 | 0.92 |
| 54 | | | | | | | | | | | | 0.92 | 0.92 |
| 55 | | | | | | | | | | | | | 0.92 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table A5-10. Factors for Calculating Black Spruce Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.75 | 0.72 | 0.69 | 0.67 | 0.66 | 0.65 | 0.63 | 0.63 | 0.62 | 0.61 | 0.60 | 0.60 | 0.59 | 0.59 | 0.58 |
| 11 | 0.88 | 0.84 | 0.81 | 0.79 | 0.77 | 0.76 | 0.74 | 0.73 | 0.72 | 0.71 | 0.71 | 0.70 | 0.69 | 0.69 | 0.68 |
| 12 | 0.96 | 0.92 | 0.89 | 0.87 | 0.85 | 0.83 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.76 | 0.75 | 0.74 |
| 13 | 1.02 | 0.98 | 0.94 | 0.92 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.79 |
| 14 | 1.06 | 1.01 | 0.98 | 0.95 | 0.93 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.82 |
| 15 | 1.09 | 1.04 | 1.01 | 0.98 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.84 |
| 16 | 1.11 | 1.06 | 1.02 | 1.00 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 17 | 1.12 | 1.08 | 1.04 | 1.01 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 18 | 1.14 | 1.09 | 1.05 | 1.02 | 1.00 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 |
| 19 | 1.14 | 1.10 | 1.06 | 1.03 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 |
| 20 | 1.15 | 1.10 | 1.07 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 |
| 21 | 1.16 | 1.11 | 1.07 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 |
| 22 | 1.16 | 1.11 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
| 23 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 24 | 1.17 | 1.12 | 1.08 | 1.05 | 1.03 | 1.00 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 |
| 25 | 1.17 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 26 | 1.18 | 1.13 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 27 | 1.18 | 1.13 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 28 | 1.18 | 1.13 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 29 | 1.18 | 1.13 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 30 | 1.18 | 1.13 | 1.09 | 1.06 | 1.04 | 1.01 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 31 | 1.18 | 1.13 | 1.09 | 1.06 | 1.04 | 1.01 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 32 | 1.18 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 |
| 33 | 1.18 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 34 | 1.19 | 1.13 | 1.10 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 35 | 1.19 | 1.14 | 1.10 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 36 | 1.19 | 1.14 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 37 | | 1.14 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 38 | | | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 39 | | | | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 40 | | | | | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 41 | | | | | | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 42 | | | | | | | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 43 | | | | | | | | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 44 | | | | | | | | | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 45 | | | | | | | | | | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 46 | | | | | | | | | | | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 47 | | | | | | | | | | | | 0.94 | 0.93 | 0.92 | 0.91 |
| 48 | | | | | | | | | | | | | 0.93 | 0.92 | 0.91 |
| 49 | | | | | | | | | | | | | | 0.92 | 0.91 |
| 50 | | | | | | | | | | | | | | | 0.92 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-11. Factors for Calculating Black Spruce Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.47 | 0.48 | 0.49 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 |
| 11 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.62 | 0.62 | 0.62 | 0.62 |
| 12 | 0.76 | 0.75 | 0.74 | 0.74 | 0.73 | 0.72 | 0.72 | 0.71 | 0.71 | 0.71 | 0.70 | 0.70 | 0.70 | 0.69 | 0.69 |
| 13 | 0.84 | 0.83 | 0.81 | 0.80 | 0.79 | 0.78 | 0.78 | 0.77 | 0.77 | 0.76 | 0.76 | 0.75 | 0.75 | 0.74 | 0.74 |
| 14 | 0.90 | 0.88 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 | 0.78 | 0.78 | 0.77 |
| 15 | 0.95 | 0.92 | 0.90 | 0.89 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 |
| 16 | 0.98 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 |
| 17 | 1.01 | 0.98 | 0.95 | 0.93 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 |
| 18 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.89 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 |
| 19 | 1.05 | 1.01 | 0.99 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 |
| 20 | 1.07 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 |
| 21 | 1.08 | 1.04 | 1.01 | 0.99 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 | 0.87 |
| 22 | 1.10 | 1.05 | 1.02 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 |
| 23 | 1.11 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 |
| 24 | | 1.07 | 1.03 | 1.01 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 |
| 25 | | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 |
| 26 | | 1.10 | 1.05 | 1.02 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 |
| 27 | | | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 |
| 28 | | | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 |
| 29 | | | | 1.03 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 |
| 30 | | | | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 |
| 31 | | | | 1.04 | 1.01 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 |
| 32 | | | | | 1.01 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 |
| 33 | | | | | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 |
| 34 | | | | | 1.02 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
| 35 | | | | | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
| 36 | | | | | | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 37 | | | | | | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 38 | | | | | | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 39 | | | | | | | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 40 | | | | | | | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 41 | | | | | | | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 42 | | | | | | | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 43 | | | | | | | | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 44 | | | | | | | | | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 45 | | | | | | | | | | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 46 | | | | | | | | | | | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 |
| 47 | | | | | | | | | | | | 0.92 | 0.92 | 0.91 | 0.90 |
| 48 | | | | | | | | | | | | | 0.92 | 0.91 | 0.90 |
| 49 | | | | | | | | | | | | | | 0.91 | 0.90 |
| 50 | | | | | | | | | | | | | | | 0.90 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-12. Factors for Calculating Black Spruce Sawlog Volume (m³/ha) at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.88 | 0.86 | 0.84 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.75 | 0.74 |
| 17 | 0.92 | 0.90 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.78 | 0.77 |
| 18 | 0.95 | 0.93 | 0.91 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 |
| 19 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.82 |
| 20 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 |
| 21 | 1.01 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 |
| 22 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 23 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 24 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 |
| 25 | 1.04 | 1.02 | 0.99 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 |
| 26 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 |
| 27 | 1.05 | 1.03 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 |
| 28 | 1.05 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 |
| 29 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 |
| 30 | 1.06 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
| 31 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
| 32 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
| 33 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 |
| 34 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 |
| 35 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 36 | 1.07 | 1.05 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 37 | 1.07 | 1.05 | 1.02 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 38 | 1.07 | 1.05 | 1.03 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 39 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 40 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 41 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 42 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 43 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 44 | | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 45 | | | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 46 | | | | 1.01 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 47 | | | | | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 48 | | | | | | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 49 | | | | | | | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 50 | | | | | | | | 0.96 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 51 | | | | | | | | | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 52 | | | | | | | | | | 0.93 | 0.93 | 0.92 | 0.91 |
| 53 | | | | | | | | | | | 0.93 | 0.92 | 0.91 |
| 54 | | | | | | | | | | | | 0.92 | 0.91 |
| 55 | | | | | | | | | | | | | 0.91 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table A5-13. Factors for Calculating Red Pine Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.71 | 0.69 | 0.67 | 0.66 | 0.65 | 0.64 | 0.63 | 0.63 | 0.62 | 0.62 | 0.62 | 0.62 | 0.61 | 0.61 | 0.61 |
| 11 | 0.87 | 0.84 | 0.82 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.76 | 0.75 | 0.75 | 0.75 | 0.74 | 0.74 | 0.74 |
| 12 | 0.97 | 0.93 | 0.91 | 0.89 | 0.88 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.82 | 0.82 |
| 13 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |
| 14 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 |
| 15 | 1.11 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| 16 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 |
| 17 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 |
| 18 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 19 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 20 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 21 | 1.19 | 1.14 | 1.11 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 22 | 1.19 | 1.15 | 1.12 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 23 | 1.19 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 24 | 1.20 | 1.16 | 1.12 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 25 | 1.20 | 1.16 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 |
| 26 | 1.20 | 1.16 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 |
| 27 | 1.20 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 |
| 28 | 1.21 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 |
| 29 | 1.21 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 |
| 30 | 1.21 | 1.17 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 | 1.02 |
| 31 | 1.21 | 1.17 | 1.13 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 | 1.02 |
| 32 | 1.21 | 1.17 | 1.13 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| 33 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.08 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| 34 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| 35 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 36 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 37 | | 1.17 | 1.14 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 38 | | | 1.14 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 39 | | | | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 40 | | | | | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 41 | | | | | | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 42 | | | | | | | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 43 | | | | | | | | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 44 | | | | | | | | | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 45 | | | | | | | | | | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 |
| 46 | | | | | | | | | | | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 |
| 47 | | | | | | | | | | | | 1.03 | 1.03 | 1.03 | 1.03 |
| 48 | | | | | | | | | | | | | 1.03 | 1.03 | 1.03 |
| 49 | | | | | | | | | | | | | | 1.03 | 1.03 |
| 50 | | | | | | | | | | | | | | | 1.03 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-14. Factors for Calculating Red Pine Shortwood Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.44 | 0.46 | 0.47 | 0.48 | 0.49 | 0.49 | 0.50 | 0.51 | 0.51 | 0.51 | 0.52 | 0.52 | 0.52 | 0.53 | 0.53 |
| 11 | 0.64 | 0.64 | 0.65 | 0.65 | 0.65 | 0.65 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.67 | 0.67 | 0.67 | 0.67 |
| 12 | 0.77 | 0.77 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 |
| 13 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.83 |
| 14 | 0.93 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| 15 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| 16 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 |
| 17 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| 18 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 |
| 19 | 1.09 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 |
| 20 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 |
| 21 | 1.12 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| 22 | 1.13 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 |
| 23 | 1.15 | 1.10 | 1.08 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 |
| 24 | | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 25 | | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 26 | | | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 27 | | | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 28 | | | | 1.08 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 29 | | | | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 30 | | | | 1.09 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 31 | | | | | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 32 | | | | | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 33 | | | | | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 34 | | | | | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 35 | | | | | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 36 | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 37 | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 38 | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 39 | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 40 | | | | | | | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 41 | | | | | | | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 42 | | | | | | | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 43 | | | | | | | | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 44 | | | | | | | | | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 45 | | | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 46 | | | | | | | | | | | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 47 | | | | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 |
| 48 | | | | | | | | | | | | | 1.02 | 1.01 | 1.01 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.01 |
| 50 | | | | | | | | | | | | | | | 1.01 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-15. Factors for Calculating Red Pine Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 |
| 17 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.87 | 0.87 |
| 18 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 |
| 19 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 |
| 20 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 |
| 21 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 22 | 1.07 | 1.05 | 1.04 | 1.03 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 |
| 23 | 1.08 | 1.06 | 1.05 | 1.04 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 24 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 25 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 26 | 1.10 | 1.08 | 1.07 | 1.06 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 27 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 |
| 28 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 29 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| 30 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 |
| 31 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 |
| 32 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.02 |
| 33 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| 34 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| 35 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 36 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.03 | 1.02 |
| 37 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 |
| 38 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 |
| 39 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 |
| 40 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 |
| 41 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 |
| 42 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 |
| 43 | 1.13 | 1.11 | 1.10 | 1.09 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.04 | 1.03 | 1.03 |
| 44 | | 1.12 | 1.10 | 1.09 | 1.07 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.04 | 1.03 | 1.03 |
| 45 | | | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 46 | | | | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 47 | | | | | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 48 | | | | | | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 49 | | | | | | | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 50 | | | | | | | | 1.05 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 51 | | | | | | | | | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 52 | | | | | | | | | | 1.04 | 1.04 | 1.03 | 1.03 |
| 53 | | | | | | | | | | | 1.04 | 1.03 | 1.03 |
| 54 | | | | | | | | | | | | 1.03 | 1.03 |
| 55 | | | | | | | | | | | | | 1.03 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table A5-16. Factors for Calculating White Pine Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.70 | 0.67 | 0.66 | 0.64 | 0.63 | 0.63 | 0.62 | 0.61 | 0.61 | 0.61 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| 11 | 0.83 | 0.80 | 0.78 | 0.77 | 0.75 | 0.74 | 0.74 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.71 | 0.71 |
| 12 | 0.92 | 0.89 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 | 0.79 | 0.78 | 0.78 |
| 13 | 0.98 | 0.95 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.84 | 0.83 |
| 14 | 1.02 | 0.99 | 0.96 | 0.94 | 0.93 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 |
| 15 | 1.06 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 |
| 16 | 1.08 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 |
| 17 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 |
| 18 | 1.11 | 1.07 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 |
| 19 | 1.12 | 1.08 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 |
| 20 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 |
| 21 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 |
| 22 | 1.15 | 1.11 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 |
| 23 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 24 | 1.16 | 1.12 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 |
| 25 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 |
| 26 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 27 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 28 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 29 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 30 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 31 | 1.18 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 32 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 33 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 34 | 1.18 | 1.14 | 1.11 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 35 | 1.18 | 1.14 | 1.11 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 36 | 1.18 | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 37 | | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 38 | | | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 39 | | | | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 40 | | | | | 1.07 | 1.06 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 41 | | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 42 | | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 43 | | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 44 | | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| 45 | | | | | | | | | | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 46 | | | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 47 | | | | | | | | | | | | 1.02 | 1.01 | 1.01 | 1.01 |
| 48 | | | | | | | | | | | | | 1.01 | 1.01 | 1.01 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.01 |
| 50 | | | | | | | | | | | | | | | 1.01 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-17. Factors for Calculating White Pine Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.42 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.48 | 0.49 | 0.49 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.52 |
| 11 | 0.59 | 0.60 | 0.60 | 0.61 | 0.61 | 0.62 | 0.62 | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.63 | 0.64 | 0.64 |
| 12 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| 13 | 0.79 | 0.79 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.77 | 0.77 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| 14 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| 15 | 0.91 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| 16 | 0.94 | 0.93 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| 17 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 |
| 18 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| 19 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 |
| 20 | 1.04 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 |
| 21 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| 22 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| 23 | 1.09 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 |
| 24 | 1.10 | 1.06 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 25 | 1.13 | 1.07 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 |
| 26 | | 1.09 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.96 |
| 27 | | | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 |
| 28 | | | 1.07 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 |
| 29 | | | | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.97 |
| 30 | | | | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 |
| 31 | | | | | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 32 | | | | | | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 33 | | | | | | | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 |
| 34 | | | | | | | | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 |
| 35 | | | | | | | | | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 |
| 36 | | | | | | | | | | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 |
| 37 | | | | | | | | | | | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 |
| 38 | | | | | | | | | | | | 1.01 | 1.00 | 0.99 | 0.99 |
| 39 | | | | | | | | | | | | | 1.02 | 1.00 | 0.99 |
| 40 | | | | | | | | | | | | | | 1.01 | 0.99 |
| 41 | | | | | | | | | | | | | | | 1.01 |
| 42 | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | |
| 44 | | | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | | | |
| 46 | | | | | | | | | | | | | | | |
| 47 | | | | | | | | | | | | | | | |
| 48 | | | | | | | | | | | | | | | |
| 49 | | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | | |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-18. Factors for Calculating White Pine Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 | 0.80 | 0.79 | 0.79 | 0.79 |
| 17 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.84 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 |
| 18 | 0.94 | 0.93 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 |
| 19 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 | 0.88 |
| 20 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 |
| 21 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |
| 22 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 |
| 23 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 |
| 24 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 |
| 25 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 |
| 26 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 |
| 27 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 |
| 28 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 |
| 29 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 30 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 31 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 32 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 33 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 34 | 1.09 | 1.07 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 35 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 36 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 37 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 38 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 39 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 40 | 1.10 | 1.08 | 1.07 | 1.06 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 41 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 42 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 |
| 43 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 44 | | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 45 | | | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 46 | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 47 | | | | | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 |
| 48 | | | | | | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 49 | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 50 | | | | | | | | 1.03 | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| 51 | | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| 52 | | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 |
| 53 | | | | | | | | | | | 1.02 | 1.01 | 1.01 |
| 54 | | | | | | | | | | | | 1.01 | 1.01 |
| 55 | | | | | | | | | | | | | 1.01 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Table A5-19. Factors for Calculating Hemlock Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.72 | 0.70 | 0.68 | 0.66 | 0.65 | 0.64 | 0.63 | 0.62 | 0.62 | 0.61 | 0.61 | 0.60 | 0.60 | 0.59 | 0.59 |
| 11 | 0.86 | 0.82 | 0.80 | 0.78 | 0.76 | 0.75 | 0.74 | 0.73 | 0.73 | 0.72 | 0.71 | 0.71 | 0.71 | 0.70 | 0.70 |
| 12 | 0.94 | 0.91 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.79 | 0.78 | 0.77 | 0.77 | 0.77 |
| 13 | 1.00 | 0.96 | 0.93 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 | 0.81 |
| 14 | 1.04 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 |
| 15 | 1.07 | 1.03 | 1.00 | 0.98 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 | 0.87 |
| 16 | 1.10 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 |
| 17 | 1.11 | 1.07 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 |
| 18 | 1.13 | 1.08 | 1.05 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 |
| 19 | 1.14 | 1.09 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 |
| 20 | 1.14 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 |
| 21 | 1.15 | 1.11 | 1.07 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 |
| 22 | 1.16 | 1.11 | 1.08 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 |
| 23 | 1.16 | 1.12 | 1.08 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
| 24 | 1.17 | 1.12 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 |
| 25 | 1.17 | 1.12 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 26 | 1.17 | 1.13 | 1.09 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 27 | 1.17 | 1.13 | 1.09 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 |
| 28 | 1.18 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 29 | 1.18 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 30 | 1.18 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 31 | 1.18 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 32 | 1.18 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 33 | 1.18 | 1.14 | 1.10 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 34 | 1.18 | 1.14 | 1.10 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 35 | 1.19 | 1.14 | 1.10 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 36 | 1.19 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 37 | | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 38 | | | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 |
| 39 | | | | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 |
| 40 | | | | | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 41 | | | | | | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 42 | | | | | | | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 43 | | | | | | | | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 44 | | | | | | | | | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 45 | | | | | | | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 46 | | | | | | | | | | | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 47 | | | | | | | | | | | | 0.98 | 0.97 | 0.97 | 0.96 |
| 48 | | | | | | | | | | | | | 0.97 | 0.97 | 0.96 |
| 49 | | | | | | | | | | | | | | 0.97 | 0.96 |
| 50 | | | | | | | | | | | | | | | 0.96 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-20. Factors for Calculating Hemlock Shortwood Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.49 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.52 |
| 11 | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 |
| 12 | 0.74 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 |
| 13 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.78 | 0.78 | 0.78 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.76 | 0.76 |
| 14 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 | 0.81 | 0.81 | 0.81 | 0.81 | 0.80 | 0.80 |
| 15 | 0.93 | 0.91 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 |
| 16 | 0.97 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 | 0.85 | 0.85 |
| 17 | 1.00 | 0.97 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 |
| 18 | 1.02 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 | 0.88 | 0.88 |
| 19 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 |
| 20 | 1.06 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 |
| 21 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 |
| 22 | 1.09 | 1.05 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 |
| 23 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |
| 24 | 1.12 | 1.07 | 1.04 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 |
| 25 | | 1.08 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 |
| 26 | | 1.09 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 |
| 27 | | | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 |
| 28 | | | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 |
| 29 | | | | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 |
| 30 | | | | 1.05 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.94 |
| 31 | | | | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 |
| 32 | | | | | 1.03 | 1.01 | 1.00 | 0.98 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 |
| 33 | | | | | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 |
| 34 | | | | | | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
| 35 | | | | | | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
| 36 | | | | | | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 |
| 37 | | | | | | | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 |
| 38 | | | | | | | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 39 | | | | | | | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 40 | | | | | | | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 41 | | | | | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 42 | | | | | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 43 | | | | | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 44 | | | | | | | | | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 |
| 45 | | | | | | | | | | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 |
| 46 | | | | | | | | | | | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 |
| 47 | | | | | | | | | | | | 0.97 | 0.96 | 0.96 | 0.95 |
| 48 | | | | | | | | | | | | | 0.96 | 0.96 | 0.95 |
| 49 | | | | | | | | | | | | | | 0.96 | 0.95 |
| 50 | | | | | | | | | | | | | | | 0.95 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Softwood Volume (m³/ha) in Table 1.

Table A5-21. Factors for Calculating Hemlock Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 16 | 0.87 | 0.86 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.79 | 0.78 | 0.78 | 0.77 | 0.77 |
| 17 | 0.92 | 0.90 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 |
| 18 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.83 |
| 19 | 0.97 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 |
| 20 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 |
| 21 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 |
| 22 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 |
| 23 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 |
| 24 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 |
| 25 | 1.05 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 |
| 26 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 |
| 27 | 1.06 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 | 0.93 |
| 28 | 1.07 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 |
| 29 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 |
| 30 | 1.07 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
| 31 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 |
| 32 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 |
| 33 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 34 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 |
| 35 | 1.09 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 36 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 37 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 38 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 |
| 39 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 |
| 40 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 41 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 42 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 43 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 44 | | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 45 | | | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 |
| 46 | | | | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 47 | | | | | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 48 | | | | | | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 49 | | | | | | | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 50 | | | | | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 51 | | | | | | | | | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 52 | | | | | | | | | | 0.98 | 0.97 | 0.97 | 0.96 |
| 53 | | | | | | | | | | | 0.97 | 0.97 | 0.96 |
| 54 | | | | | | | | | | | | 0.97 | 0.96 |
| 55 | | | | | | | | | | | | | 0.96 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 10.16 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Softwood Sawlog Volume (m³/ha) in Table 3.

Appendix 5B

Hardwood Species Diameter Correction Factors

Following are Tables containing species-specific diameter class correction factors for merchantable volume, shortwood volume, and sawlog volume. Tables are presented in the order of:

Maple (Red and Sugar)
Yellow Birch
White Birch
Red Oak
Trembling Aspen

Table A5-22. Factors for Calculating Maple Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.73 | 0.71 | 0.69 | 0.68 | 0.67 | 0.66 | 0.65 | 0.65 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.63 |
| 11 | 0.87 | 0.84 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.76 | 0.76 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 12 | 0.95 | 0.92 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.82 | 0.82 | 0.82 | 0.82 |
| 13 | 1.01 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| 14 | 1.05 | 1.01 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 |
| 15 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 |
| 16 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| 17 | 1.11 | 1.07 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 |
| 18 | 1.13 | 1.08 | 1.06 | 1.03 | 1.02 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 |
| 19 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 |
| 20 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| 21 | 1.15 | 1.11 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 22 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 |
| 23 | 1.16 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 |
| 24 | 1.16 | 1.12 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 25 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 26 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 0.99 |
| 27 | 1.17 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 28 | 1.17 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 29 | 1.17 | 1.13 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 30 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 |
| 31 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 32 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 33 | 1.17 | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 34 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 35 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 36 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 37 | | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 38 | | | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 39 | | | | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 40 | | | | | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 41 | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 42 | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 43 | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 44 | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 45 | | | | | | | | | | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 |
| 46 | | | | | | | | | | | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| 47 | | | | | | | | | | | | 1.01 | 1.01 | 1.01 | 1.01 |
| 48 | | | | | | | | | | | | | 1.01 | 1.01 | 1.01 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.01 |
| 50 | | | | | | | | | | | | | | | 1.01 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-23. Factors for Calculating Maple Shortwood Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.42 | 0.44 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.52 | 0.53 | 0.53 | 0.54 | 0.54 | 0.54 |
| 11 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.63 | 0.64 | 0.64 | 0.65 | 0.65 | 0.65 | 0.66 | 0.66 | 0.66 | 0.67 |
| 12 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.73 | 0.73 | 0.73 | 0.73 | 0.74 | 0.74 | 0.74 | 0.74 | 0.75 | 0.75 |
| 13 | 0.80 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |
| 14 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| 15 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 | 0.86 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| 16 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| 17 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.91 |
| 18 | 0.98 | 0.96 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| 19 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| 20 | 1.01 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| 21 | 1.02 | 0.99 | 0.98 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| 22 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| 23 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| 24 | 1.04 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| 25 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| 26 | 1.05 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 27 | 1.05 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 28 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 29 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 30 | 1.06 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 31 | 1.06 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 32 | 1.06 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 |
| 33 | 1.06 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 34 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 35 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 36 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 37 | | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 38 | | | 1.02 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 39 | | | | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 40 | | | | | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 41 | | | | | | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 42 | | | | | | | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 43 | | | | | | | | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 44 | | | | | | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 45 | | | | | | | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 46 | | | | | | | | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 47 | | | | | | | | | | | | 0.97 | 0.97 | 0.97 | 0.97 |
| 48 | | | | | | | | | | | | | 0.97 | 0.97 | 0.97 |
| 49 | | | | | | | | | | | | | | 0.97 | 0.97 |
| 50 | | | | | | | | | | | | | | | 0.97 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-24. Factors for Calculating Maple Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 22 | 0.39 | 0.37 | 0.35 | 0.33 | 0.32 | 0.31 | 0.30 | 0.29 | 0.29 | 0.28 | 0.28 | 0.27 | 0.27 |
| 23 | 0.60 | 0.56 | 0.53 | 0.51 | 0.49 | 0.47 | 0.46 | 0.45 | 0.44 | 0.43 | 0.42 | 0.41 | 0.41 |
| 24 | 0.77 | 0.72 | 0.68 | 0.65 | 0.63 | 0.61 | 0.59 | 0.57 | 0.56 | 0.55 | 0.54 | 0.53 | 0.52 |
| 25 | 0.91 | 0.85 | 0.80 | 0.77 | 0.74 | 0.71 | 0.69 | 0.67 | 0.66 | 0.64 | 0.63 | 0.62 | 0.61 |
| 26 | 1.02 | 0.96 | 0.91 | 0.86 | 0.83 | 0.80 | 0.78 | 0.76 | 0.74 | 0.72 | 0.71 | 0.70 | 0.69 |
| 27 | 1.11 | 1.04 | 0.99 | 0.94 | 0.91 | 0.87 | 0.85 | 0.82 | 0.81 | 0.79 | 0.77 | 0.76 | 0.75 |
| 28 | 1.19 | 1.12 | 1.06 | 1.01 | 0.97 | 0.94 | 0.91 | 0.88 | 0.86 | 0.84 | 0.83 | 0.81 | 0.80 |
| 29 | 1.26 | 1.18 | 1.12 | 1.06 | 1.02 | 0.99 | 0.96 | 0.93 | 0.91 | 0.89 | 0.87 | 0.86 | 0.85 |
| 30 | 1.31 | 1.23 | 1.17 | 1.11 | 1.07 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 |
| 31 | 1.36 | 1.28 | 1.21 | 1.15 | 1.11 | 1.07 | 1.03 | 1.01 | 0.98 | 0.96 | 0.94 | 0.93 | 0.91 |
| 32 | 1.40 | 1.31 | 1.24 | 1.19 | 1.14 | 1.10 | 1.07 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 |
| 33 | 1.44 | 1.35 | 1.27 | 1.22 | 1.17 | 1.13 | 1.09 | 1.06 | 1.04 | 1.01 | 1.00 | 0.98 | 0.96 |
| 34 | 1.47 | 1.38 | 1.30 | 1.24 | 1.19 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.00 | 0.98 |
| 35 | 1.49 | 1.40 | 1.32 | 1.26 | 1.21 | 1.17 | 1.13 | 1.10 | 1.08 | 1.05 | 1.03 | 1.02 | 1.00 |
| 36 | 1.52 | 1.42 | 1.34 | 1.28 | 1.23 | 1.19 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 |
| 37 | 1.54 | 1.44 | 1.36 | 1.30 | 1.25 | 1.20 | 1.17 | 1.13 | 1.11 | 1.08 | 1.06 | 1.05 | 1.03 |
| 38 | 1.55 | 1.46 | 1.38 | 1.31 | 1.26 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.04 |
| 39 | 1.57 | 1.47 | 1.39 | 1.33 | 1.27 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.05 |
| 40 | 1.58 | 1.48 | 1.40 | 1.34 | 1.29 | 1.24 | 1.20 | 1.17 | 1.14 | 1.12 | 1.10 | 1.08 | 1.06 |
| 41 | 1.60 | 1.50 | 1.42 | 1.35 | 1.30 | 1.25 | 1.21 | 1.18 | 1.15 | 1.13 | 1.10 | 1.09 | 1.07 |
| 42 | 1.61 | 1.51 | 1.42 | 1.36 | 1.30 | 1.26 | 1.22 | 1.19 | 1.16 | 1.13 | 1.11 | 1.09 | 1.08 |
| 43 | 1.62 | 1.51 | 1.43 | 1.37 | 1.31 | 1.27 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.08 |
| 44 | | 1.52 | 1.44 | 1.37 | 1.32 | 1.27 | 1.23 | 1.20 | 1.17 | 1.15 | 1.12 | 1.10 | 1.09 |
| 45 | | | 1.45 | 1.38 | 1.33 | 1.28 | 1.24 | 1.21 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 |
| 46 | | | | 1.39 | 1.33 | 1.28 | 1.24 | 1.21 | 1.18 | 1.16 | 1.13 | 1.12 | 1.10 |
| 47 | | | | | 1.34 | 1.29 | 1.25 | 1.22 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 |
| 48 | | | | | | 1.29 | 1.25 | 1.22 | 1.19 | 1.16 | 1.14 | 1.12 | 1.11 |
| 49 | | | | | | | 1.26 | 1.22 | 1.19 | 1.17 | 1.15 | 1.13 | 1.11 |
| 50 | | | | | | | | 1.23 | 1.20 | 1.17 | 1.15 | 1.13 | 1.11 |
| 51 | | | | | | | | | 1.20 | 1.17 | 1.15 | 1.13 | 1.12 |
| 52 | | | | | | | | | | 1.18 | 1.16 | 1.14 | 1.12 |
| 53 | | | | | | | | | | | 1.16 | 1.14 | 1.12 |
| 54 | | | | | | | | | | | | 1.14 | 1.12 |
| 55 | | | | | | | | | | | | | 1.13 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 20.32 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.

Table A5-25. Factors for Calculating Yellow Birch Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.76 | 0.73 | 0.71 | 0.69 | 0.68 | 0.67 | 0.66 | 0.65 | 0.65 | 0.64 | 0.64 | 0.63 | 0.63 | 0.63 | 0.62 |
| 11 | 0.88 | 0.84 | 0.82 | 0.80 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.74 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 |
| 12 | 0.96 | 0.92 | 0.89 | 0.87 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 | 0.79 | 0.78 |
| 13 | 1.01 | 0.97 | 0.94 | 0.92 | 0.90 | 0.89 | 0.87 | 0.87 | 0.86 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 |
| 14 | 1.05 | 1.01 | 0.98 | 0.96 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.86 | 0.86 |
| 15 | 1.08 | 1.04 | 1.01 | 0.98 | 0.96 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 |
| 16 | 1.11 | 1.06 | 1.03 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 |
| 17 | 1.12 | 1.08 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 |
| 18 | 1.14 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 | 0.93 | 0.93 |
| 19 | 1.15 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 |
| 20 | 1.16 | 1.11 | 1.08 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
| 21 | 1.17 | 1.12 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 |
| 22 | 1.17 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 |
| 23 | 1.18 | 1.13 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 |
| 24 | 1.18 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 |
| 25 | 1.19 | 1.14 | 1.10 | 1.08 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 26 | 1.19 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 |
| 27 | 1.19 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 |
| 28 | 1.20 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 |
| 29 | 1.20 | 1.15 | 1.11 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 |
| 30 | 1.20 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 |
| 31 | 1.20 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 32 | 1.20 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 33 | 1.20 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 34 | 1.21 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 | 0.98 |
| 35 | 1.21 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 |
| 36 | 1.21 | 1.16 | 1.12 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 |
| 37 | | 1.16 | 1.12 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 |
| 38 | | | 1.12 | 1.10 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 |
| 39 | | | | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 |
| 40 | | | | | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 |
| 41 | | | | | | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 42 | | | | | | | 1.05 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 43 | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 44 | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 45 | | | | | | | | | | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 46 | | | | | | | | | | | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 47 | | | | | | | | | | | | 1.00 | 1.00 | 0.99 | 0.99 |
| 48 | | | | | | | | | | | | | 1.00 | 0.99 | 0.99 |
| 49 | | | | | | | | | | | | | | 0.99 | 0.99 |
| 50 | | | | | | | | | | | | | | | 0.99 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-26. Factors for Calculating Yellow Birch Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.38 | 0.41 | 0.43 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.49 | 0.50 | 0.50 | 0.51 | 0.51 | 0.52 | 0.52 |
| 11 | 0.54 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.60 | 0.61 | 0.61 | 0.61 | 0.62 | 0.62 | 0.62 | 0.62 | 0.63 |
| 12 | 0.65 | 0.66 | 0.67 | 0.68 | 0.68 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.70 | 0.70 | 0.70 |
| 13 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 14 | 0.80 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| 15 | 0.84 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.81 | 0.81 |
| 16 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| 17 | 0.91 | 0.89 | 0.89 | 0.88 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.85 | 0.85 |
| 18 | 0.93 | 0.92 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| 19 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| 20 | 0.96 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| 21 | 0.98 | 0.96 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.89 |
| 22 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 |
| 23 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| 24 | 1.01 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 |
| 25 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 | 0.91 |
| 26 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 |
| 27 | 1.03 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 |
| 28 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 |
| 29 | 1.04 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 |
| 30 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 |
| 31 | 1.04 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 |
| 32 | 1.05 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 |
| 33 | 1.05 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 |
| 34 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 |
| 35 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 |
| 36 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 |
| 37 | | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| 38 | | | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| 39 | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 |
| 40 | | | | | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 |
| 41 | | | | | | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 |
| 42 | | | | | | | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 |
| 43 | | | | | | | | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 |
| 44 | | | | | | | | | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.94 |
| 45 | | | | | | | | | | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.94 |
| 46 | | | | | | | | | | | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 |
| 47 | | | | | | | | | | | | 0.95 | 0.95 | 0.95 | 0.94 |
| 48 | | | | | | | | | | | | | 0.95 | 0.95 | 0.94 |
| 49 | | | | | | | | | | | | | | 0.95 | 0.95 |
| 50 | | | | | | | | | | | | | | | 0.95 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-27. Factors for Calculating Yellow Birch Sawlog Volume (m³/ha) at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 22 | 0.53 | 0.49 | 0.47 | 0.45 | 0.43 | 0.41 | 0.40 | 0.39 | 0.38 | 0.37 | 0.36 | 0.35 | 0.35 |
| 23 | 0.70 | 0.65 | 0.62 | 0.59 | 0.56 | 0.54 | 0.52 | 0.51 | 0.49 | 0.48 | 0.47 | 0.46 | 0.45 |
| 24 | 0.84 | 0.78 | 0.74 | 0.70 | 0.67 | 0.65 | 0.62 | 0.61 | 0.59 | 0.58 | 0.56 | 0.55 | 0.54 |
| 25 | 0.95 | 0.89 | 0.84 | 0.80 | 0.76 | 0.73 | 0.71 | 0.69 | 0.67 | 0.65 | 0.64 | 0.63 | 0.62 |
| 26 | 1.05 | 0.98 | 0.92 | 0.88 | 0.84 | 0.81 | 0.78 | 0.76 | 0.74 | 0.72 | 0.70 | 0.69 | 0.68 |
| 27 | 1.13 | 1.05 | 0.99 | 0.94 | 0.90 | 0.87 | 0.84 | 0.81 | 0.79 | 0.77 | 0.76 | 0.74 | 0.73 |
| 28 | 1.20 | 1.12 | 1.05 | 1.00 | 0.96 | 0.92 | 0.89 | 0.86 | 0.84 | 0.82 | 0.80 | 0.79 | 0.77 |
| 29 | 1.25 | 1.17 | 1.10 | 1.05 | 1.00 | 0.97 | 0.93 | 0.91 | 0.88 | 0.86 | 0.84 | 0.82 | 0.81 |
| 30 | 1.30 | 1.22 | 1.15 | 1.09 | 1.04 | 1.00 | 0.97 | 0.94 | 0.92 | 0.89 | 0.87 | 0.86 | 0.84 |
| 31 | 1.35 | 1.26 | 1.19 | 1.13 | 1.08 | 1.04 | 1.00 | 0.97 | 0.95 | 0.92 | 0.90 | 0.88 | 0.87 |
| 32 | 1.39 | 1.29 | 1.22 | 1.16 | 1.11 | 1.07 | 1.03 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 | 0.89 |
| 33 | 1.42 | 1.33 | 1.25 | 1.19 | 1.14 | 1.09 | 1.06 | 1.02 | 1.00 | 0.97 | 0.95 | 0.93 | 0.91 |
| 34 | 1.45 | 1.35 | 1.28 | 1.21 | 1.16 | 1.11 | 1.08 | 1.04 | 1.02 | 0.99 | 0.97 | 0.95 | 0.93 |
| 35 | 1.47 | 1.38 | 1.30 | 1.23 | 1.18 | 1.13 | 1.10 | 1.06 | 1.03 | 1.01 | 0.99 | 0.97 | 0.95 |
| 36 | 1.50 | 1.40 | 1.32 | 1.25 | 1.20 | 1.15 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 |
| 37 | 1.52 | 1.42 | 1.34 | 1.27 | 1.21 | 1.17 | 1.13 | 1.09 | 1.06 | 1.04 | 1.01 | 0.99 | 0.98 |
| 38 | 1.54 | 1.43 | 1.35 | 1.28 | 1.23 | 1.18 | 1.14 | 1.11 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 |
| 39 | 1.55 | 1.45 | 1.37 | 1.30 | 1.24 | 1.19 | 1.15 | 1.12 | 1.09 | 1.06 | 1.04 | 1.02 | 1.00 |
| 40 | 1.57 | 1.46 | 1.38 | 1.31 | 1.25 | 1.20 | 1.16 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.01 |
| 41 | 1.58 | 1.47 | 1.39 | 1.32 | 1.26 | 1.21 | 1.17 | 1.14 | 1.11 | 1.08 | 1.06 | 1.03 | 1.02 |
| 42 | 1.59 | 1.49 | 1.40 | 1.33 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.09 | 1.06 | 1.04 | 1.02 |
| 43 | 1.60 | 1.50 | 1.41 | 1.34 | 1.28 | 1.23 | 1.19 | 1.15 | 1.12 | 1.10 | 1.07 | 1.05 | 1.03 |
| 44 | | 1.51 | 1.42 | 1.35 | 1.29 | 1.24 | 1.20 | 1.16 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 |
| 45 | | | 1.43 | 1.36 | 1.30 | 1.25 | 1.20 | 1.17 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 |
| 46 | | | | 1.36 | 1.30 | 1.25 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 |
| 47 | | | | | 1.31 | 1.26 | 1.22 | 1.18 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 |
| 48 | | | | | | 1.26 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 |
| 49 | | | | | | | 1.23 | 1.19 | 1.16 | 1.13 | 1.10 | 1.08 | 1.06 |
| 50 | | | | | | | | 1.19 | 1.16 | 1.13 | 1.11 | 1.08 | 1.07 |
| 51 | | | | | | | | | 1.16 | 1.14 | 1.11 | 1.09 | 1.07 |
| 52 | | | | | | | | | | 1.14 | 1.11 | 1.09 | 1.07 |
| 53 | | | | | | | | | | | 1.12 | 1.09 | 1.08 |
| 54 | | | | | | | | | | | | 1.10 | 1.08 |
| 55 | | | | | | | | | | | | | 1.08 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 20.32 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.

Table A5-28. Factors for Calculating White Birch Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.81 | 0.77 | 0.74 | 0.72 | 0.70 | 0.68 | 0.67 | 0.66 | 0.65 | 0.64 | 0.63 | 0.63 | 0.62 | 0.61 | 0.61 |
| 11 | 0.94 | 0.90 | 0.86 | 0.84 | 0.81 | 0.80 | 0.78 | 0.77 | 0.76 | 0.74 | 0.74 | 0.73 | 0.72 | 0.71 | 0.70 |
| 12 | 1.03 | 0.98 | 0.95 | 0.92 | 0.89 | 0.87 | 0.86 | 0.84 | 0.83 | 0.82 | 0.80 | 0.80 | 0.79 | 0.78 | 0.77 |
| 13 | 1.10 | 1.05 | 1.01 | 0.97 | 0.95 | 0.93 | 0.91 | 0.89 | 0.88 | 0.87 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 |
| 14 | 1.14 | 1.09 | 1.05 | 1.01 | 0.99 | 0.96 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 |
| 15 | 1.18 | 1.12 | 1.08 | 1.05 | 1.02 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 |
| 16 | 1.21 | 1.15 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 17 | 1.23 | 1.17 | 1.12 | 1.09 | 1.06 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 |
| 18 | 1.24 | 1.18 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 |
| 19 | 1.26 | 1.20 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.95 | 0.94 | 0.94 |
| 20 | 1.27 | 1.21 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 |
| 21 | 1.28 | 1.22 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 |
| 22 | 1.29 | 1.23 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 |
| 23 | 1.29 | 1.23 | 1.18 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 |
| 24 | 1.30 | 1.24 | 1.19 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.97 | 0.97 |
| 25 | 1.30 | 1.24 | 1.19 | 1.16 | 1.12 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 |
| 26 | 1.31 | 1.25 | 1.20 | 1.16 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 |
| 27 | 1.31 | 1.25 | 1.20 | 1.16 | 1.13 | 1.11 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 |
| 28 | 1.32 | 1.25 | 1.20 | 1.17 | 1.13 | 1.11 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 |
| 29 | 1.32 | 1.26 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 |
| 30 | 1.32 | 1.26 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 |
| 31 | 1.32 | 1.26 | 1.21 | 1.17 | 1.14 | 1.11 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 |
| 32 | 1.33 | 1.26 | 1.21 | 1.17 | 1.14 | 1.12 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 |
| 33 | 1.33 | 1.26 | 1.21 | 1.18 | 1.14 | 1.12 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 |
| 34 | 1.33 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 |
| 35 | 1.33 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 |
| 36 | 1.33 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 |
| 37 | | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 |
| 38 | | | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 |
| 39 | | | | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 |
| 40 | | | | | 1.15 | 1.13 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 |
| 41 | | | | | | 1.13 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 |
| 42 | | | | | | | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 |
| 43 | | | | | | | | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.00 | 0.99 |
| 44 | | | | | | | | | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.00 | 0.99 |
| 45 | | | | | | | | | | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 |
| 46 | | | | | | | | | | | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 |
| 47 | | | | | | | | | | | | 1.03 | 1.02 | 1.01 | 1.00 |
| 48 | | | | | | | | | | | | | 1.02 | 1.01 | 1.00 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.00 |
| 50 | | | | | | | | | | | | | | | 1.00 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-29. Factors for Calculating White Birch Shortwood Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.44 | 0.46 | 0.48 | 0.49 | 0.49 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 |
| 11 | 0.61 | 0.62 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.62 | 0.62 | 0.62 |
| 12 | 0.74 | 0.74 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.71 | 0.71 | 0.70 | 0.70 | 0.70 |
| 13 | 0.83 | 0.82 | 0.81 | 0.80 | 0.80 | 0.79 | 0.78 | 0.78 | 0.77 | 0.77 | 0.77 | 0.76 | 0.76 | 0.75 | 0.75 |
| 14 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.81 | 0.81 | 0.80 | 0.80 | 0.79 | 0.79 |
| 15 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 |
| 16 | 0.99 | 0.96 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 |
| 17 | 1.02 | 0.99 | 0.97 | 0.96 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 | 0.86 |
| 18 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.89 | 0.88 | 0.87 |
| 19 | 1.07 | 1.04 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 | 0.89 |
| 20 | 1.09 | 1.06 | 1.03 | 1.01 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.90 |
| 21 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 |
| 22 | 1.12 | 1.08 | 1.05 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 |
| 23 | 1.13 | 1.09 | 1.06 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.92 |
| 24 | 1.14 | 1.10 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 | 0.92 |
| 25 | 1.15 | 1.11 | 1.08 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 |
| 26 | 1.16 | 1.12 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.93 |
| 27 | 1.16 | 1.12 | 1.09 | 1.07 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 |
| 28 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 |
| 29 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.94 |
| 30 | 1.18 | 1.14 | 1.10 | 1.08 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 |
| 31 | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 |
| 32 | 1.19 | 1.15 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 |
| 33 | 1.19 | 1.15 | 1.11 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 |
| 34 | 1.20 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.95 |
| 35 | 1.20 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 |
| 36 | 1.20 | 1.16 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 |
| 37 | | 1.16 | 1.12 | 1.10 | 1.07 | 1.05 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 |
| 38 | | | 1.13 | 1.10 | 1.07 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 |
| 39 | | | | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 |
| 40 | | | | | 1.08 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 |
| 41 | | | | | | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 42 | | | | | | | 1.04 | 1.03 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 |
| 43 | | | | | | | | 1.03 | 1.02 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 |
| 44 | | | | | | | | | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 |
| 45 | | | | | | | | | | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 |
| 46 | | | | | | | | | | | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 |
| 47 | | | | | | | | | | | | 0.99 | 0.98 | 0.97 | 0.96 |
| 48 | | | | | | | | | | | | | 0.98 | 0.97 | 0.96 |
| 49 | | | | | | | | | | | | | | 0.97 | 0.96 |
| 50 | | | | | | | | | | | | | | | 0.96 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-30. Factors for Calculating White Birch Sawlog Volume (m³/ha)
at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 22 | 0.52 | 0.48 | 0.45 | 0.43 | 0.41 | 0.39 | 0.38 | 0.36 | 0.35 | 0.34 | 0.33 | 0.33 | 0.32 |
| 23 | 0.70 | 0.65 | 0.61 | 0.58 | 0.55 | 0.53 | 0.51 | 0.49 | 0.47 | 0.46 | 0.45 | 0.44 | 0.43 |
| 24 | 0.85 | 0.79 | 0.74 | 0.70 | 0.67 | 0.64 | 0.61 | 0.59 | 0.57 | 0.55 | 0.54 | 0.53 | 0.51 |
| 25 | 0.97 | 0.90 | 0.85 | 0.80 | 0.76 | 0.73 | 0.70 | 0.68 | 0.65 | 0.63 | 0.62 | 0.60 | 0.59 |
| 26 | 1.08 | 1.00 | 0.94 | 0.89 | 0.84 | 0.81 | 0.77 | 0.75 | 0.72 | 0.70 | 0.68 | 0.67 | 0.65 |
| 27 | 1.17 | 1.08 | 1.01 | 0.96 | 0.91 | 0.87 | 0.84 | 0.81 | 0.78 | 0.76 | 0.74 | 0.72 | 0.70 |
| 28 | 1.24 | 1.15 | 1.08 | 1.02 | 0.97 | 0.93 | 0.89 | 0.86 | 0.83 | 0.81 | 0.78 | 0.76 | 0.75 |
| 29 | 1.31 | 1.21 | 1.13 | 1.07 | 1.02 | 0.97 | 0.94 | 0.90 | 0.87 | 0.85 | 0.82 | 0.80 | 0.78 |
| 30 | 1.36 | 1.26 | 1.18 | 1.12 | 1.06 | 1.02 | 0.97 | 0.94 | 0.91 | 0.88 | 0.86 | 0.84 | 0.82 |
| 31 | 1.41 | 1.31 | 1.22 | 1.16 | 1.10 | 1.05 | 1.01 | 0.97 | 0.94 | 0.91 | 0.89 | 0.87 | 0.85 |
| 32 | 1.45 | 1.35 | 1.26 | 1.19 | 1.13 | 1.08 | 1.04 | 1.00 | 0.97 | 0.94 | 0.91 | 0.89 | 0.87 |
| 33 | 1.49 | 1.38 | 1.29 | 1.22 | 1.16 | 1.11 | 1.07 | 1.03 | 0.99 | 0.96 | 0.94 | 0.91 | 0.89 |
| 34 | 1.52 | 1.41 | 1.32 | 1.25 | 1.19 | 1.13 | 1.09 | 1.05 | 1.02 | 0.99 | 0.96 | 0.93 | 0.91 |
| 35 | 1.55 | 1.44 | 1.35 | 1.27 | 1.21 | 1.16 | 1.11 | 1.07 | 1.03 | 1.00 | 0.98 | 0.95 | 0.93 |
| 36 | 1.58 | 1.46 | 1.37 | 1.29 | 1.23 | 1.17 | 1.13 | 1.09 | 1.05 | 1.02 | 0.99 | 0.97 | 0.95 |
| 37 | 1.60 | 1.48 | 1.39 | 1.31 | 1.25 | 1.19 | 1.14 | 1.10 | 1.07 | 1.03 | 1.01 | 0.98 | 0.96 |
| 38 | 1.62 | 1.50 | 1.41 | 1.33 | 1.26 | 1.21 | 1.16 | 1.12 | 1.08 | 1.05 | 1.02 | 0.99 | 0.97 |
| 39 | 1.64 | 1.52 | 1.42 | 1.34 | 1.28 | 1.22 | 1.17 | 1.13 | 1.09 | 1.06 | 1.03 | 1.01 | 0.98 |
| 40 | 1.66 | 1.53 | 1.44 | 1.36 | 1.29 | 1.23 | 1.18 | 1.14 | 1.10 | 1.07 | 1.04 | 1.02 | 0.99 |
| 41 | 1.67 | 1.55 | 1.45 | 1.37 | 1.30 | 1.24 | 1.19 | 1.15 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 |
| 42 | 1.68 | 1.56 | 1.46 | 1.38 | 1.31 | 1.25 | 1.20 | 1.16 | 1.12 | 1.09 | 1.06 | 1.03 | 1.01 |
| 43 | 1.70 | 1.57 | 1.47 | 1.39 | 1.32 | 1.26 | 1.21 | 1.17 | 1.13 | 1.10 | 1.07 | 1.04 | 1.02 |
| 44 | | 1.58 | 1.48 | 1.40 | 1.33 | 1.27 | 1.22 | 1.18 | 1.14 | 1.10 | 1.07 | 1.05 | 1.02 |
| 45 | | | 1.49 | 1.41 | 1.34 | 1.28 | 1.23 | 1.18 | 1.15 | 1.11 | 1.08 | 1.05 | 1.03 |
| 46 | | | | 1.42 | 1.35 | 1.29 | 1.24 | 1.19 | 1.15 | 1.12 | 1.09 | 1.06 | 1.04 |
| 47 | | | | | 1.35 | 1.29 | 1.24 | 1.20 | 1.16 | 1.12 | 1.09 | 1.07 | 1.04 |
| 48 | | | | | | 1.30 | 1.25 | 1.20 | 1.16 | 1.13 | 1.10 | 1.07 | 1.05 |
| 49 | | | | | | | 1.25 | 1.21 | 1.17 | 1.13 | 1.10 | 1.08 | 1.05 |
| 50 | | | | | | | | 1.21 | 1.17 | 1.14 | 1.11 | 1.08 | 1.05 |
| 51 | | | | | | | | | 1.18 | 1.14 | 1.11 | 1.08 | 1.06 |
| 52 | | | | | | | | | | 1.15 | 1.12 | 1.09 | 1.06 |
| 53 | | | | | | | | | | | 1.12 | 1.09 | 1.07 |
| 54 | | | | | | | | | | | | 1.09 | 1.07 |
| 55 | | | | | | | | | | | | | 1.07 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 20.32 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.

Table A5-31. Factors for Calculating Red Oak Merchantable Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.80 | 0.77 | 0.75 | 0.73 | 0.72 | 0.70 | 0.69 | 0.69 | 0.68 | 0.67 | 0.67 | 0.67 | 0.66 | 0.66 | 0.65 |
| 11 | 0.95 | 0.91 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.79 | 0.78 | 0.78 | 0.77 | 0.77 |
| 12 | 1.04 | 1.00 | 0.97 | 0.94 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 |
| 13 | 1.10 | 1.06 | 1.03 | 1.00 | 0.98 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 |
| 14 | 1.15 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 |
| 15 | 1.18 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 |
| 16 | 1.20 | 1.15 | 1.12 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.97 | 0.97 |
| 17 | 1.22 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 |
| 18 | 1.23 | 1.18 | 1.14 | 1.11 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 |
| 19 | 1.24 | 1.19 | 1.15 | 1.12 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 |
| 20 | 1.25 | 1.20 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| 21 | 1.25 | 1.20 | 1.16 | 1.14 | 1.11 | 1.09 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 |
| 22 | 1.26 | 1.21 | 1.17 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 |
| 23 | 1.26 | 1.21 | 1.17 | 1.14 | 1.12 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 |
| 24 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 25 | 1.27 | 1.22 | 1.18 | 1.15 | 1.12 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| 26 | 1.27 | 1.22 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 |
| 27 | 1.27 | 1.22 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 |
| 28 | 1.28 | 1.22 | 1.18 | 1.15 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 |
| 29 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 |
| 30 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 |
| 31 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.10 | 1.09 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 |
| 32 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.11 | 1.10 | 1.09 | 1.07 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 |
| 33 | 1.28 | 1.23 | 1.19 | 1.16 | 1.13 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 |
| 34 | 1.28 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 |
| 35 | 1.28 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 |
| 36 | 1.28 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 |
| 37 | | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 |
| 38 | | | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 |
| 39 | | | | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 |
| 40 | | | | | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 |
| 41 | | | | | | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 |
| 42 | | | | | | | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 |
| 43 | | | | | | | | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 |
| 44 | | | | | | | | | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 |
| 45 | | | | | | | | | | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 |
| 46 | | | | | | | | | | | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 |
| 47 | | | | | | | | | | | | 1.05 | 1.05 | 1.04 | 1.04 |
| 48 | | | | | | | | | | | | | 1.05 | 1.04 | 1.04 |
| 49 | | | | | | | | | | | | | | 1.04 | 1.04 |
| 50 | | | | | | | | | | | | | | | 1.04 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-32. Factors for Calculating Red Oak Shortwood Volume (m³/ha)
at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.46 | 0.48 | 0.50 | 0.51 | 0.52 | 0.53 | 0.53 | 0.54 | 0.54 | 0.55 | 0.55 | 0.55 | 0.56 | 0.56 | 0.56 |
| 11 | 0.65 | 0.66 | 0.67 | 0.67 | 0.67 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 |
| 12 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| 13 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| 14 | 0.94 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 |
| 15 | 0.98 | 0.97 | 0.95 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 |
| 16 | 1.02 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |
| 17 | 1.05 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 |
| 18 | 1.07 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 |
| 19 | 1.09 | 1.06 | 1.04 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 |
| 20 | 1.10 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 |
| 21 | 1.11 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 |
| 22 | 1.12 | 1.09 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.97 |
| 23 | 1.13 | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| 24 | 1.13 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 |
| 25 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 |
| 26 | 1.14 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| 27 | 1.15 | 1.11 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 |
| 28 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 29 | 1.15 | 1.12 | 1.09 | 1.07 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 |
| 30 | 1.16 | 1.12 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 |
| 31 | 1.16 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 |
| 32 | 1.16 | 1.12 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 0.99 |
| 33 | 1.16 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 34 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 35 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 36 | 1.17 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 |
| 37 | | 1.13 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 38 | | | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 |
| 39 | | | | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 40 | | | | | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 41 | | | | | | 1.05 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 42 | | | | | | | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 43 | | | | | | | | 1.04 | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 44 | | | | | | | | | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 45 | | | | | | | | | | 1.02 | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 46 | | | | | | | | | | | 1.02 | 1.01 | 1.01 | 1.00 | 1.00 |
| 47 | | | | | | | | | | | | 1.01 | 1.01 | 1.00 | 1.00 |
| 48 | | | | | | | | | | | | | 1.01 | 1.00 | 1.00 |
| 49 | | | | | | | | | | | | | | 1.01 | 1.00 |
| 50 | | | | | | | | | | | | | | | 1.00 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-33. Factors for Calculating Red Oak Sawlog Volume (m³/ha) at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 22 | 0.42 | 0.39 | 0.37 | 0.35 | 0.34 | 0.33 | 0.32 | 0.31 | 0.30 | 0.29 | 0.29 | 0.28 | 0.28 |
| 23 | 0.64 | 0.60 | 0.57 | 0.54 | 0.52 | 0.50 | 0.48 | 0.47 | 0.45 | 0.44 | 0.43 | 0.43 | 0.42 |
| 24 | 0.82 | 0.77 | 0.73 | 0.69 | 0.66 | 0.64 | 0.61 | 0.60 | 0.58 | 0.57 | 0.55 | 0.54 | 0.53 |
| 25 | 0.97 | 0.91 | 0.86 | 0.81 | 0.78 | 0.75 | 0.72 | 0.70 | 0.68 | 0.67 | 0.65 | 0.64 | 0.63 |
| 26 | 1.09 | 1.02 | 0.96 | 0.92 | 0.88 | 0.84 | 0.81 | 0.79 | 0.77 | 0.75 | 0.73 | 0.72 | 0.70 |
| 27 | 1.19 | 1.12 | 1.05 | 1.00 | 0.96 | 0.92 | 0.89 | 0.86 | 0.84 | 0.82 | 0.80 | 0.78 | 0.77 |
| 28 | 1.28 | 1.19 | 1.13 | 1.07 | 1.02 | 0.98 | 0.95 | 0.92 | 0.89 | 0.87 | 0.85 | 0.84 | 0.82 |
| 29 | 1.35 | 1.26 | 1.19 | 1.13 | 1.08 | 1.04 | 1.00 | 0.97 | 0.94 | 0.92 | 0.90 | 0.88 | 0.86 |
| 30 | 1.41 | 1.32 | 1.24 | 1.18 | 1.13 | 1.08 | 1.05 | 1.01 | 0.99 | 0.96 | 0.94 | 0.92 | 0.90 |
| 31 | 1.46 | 1.36 | 1.29 | 1.22 | 1.17 | 1.12 | 1.08 | 1.05 | 1.02 | 1.00 | 0.97 | 0.95 | 0.94 |
| 32 | 1.51 | 1.40 | 1.32 | 1.26 | 1.20 | 1.15 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 |
| 33 | 1.54 | 1.44 | 1.36 | 1.29 | 1.23 | 1.18 | 1.14 | 1.11 | 1.08 | 1.05 | 1.03 | 1.01 | 0.99 |
| 34 | 1.58 | 1.47 | 1.38 | 1.32 | 1.26 | 1.21 | 1.17 | 1.13 | 1.10 | 1.07 | 1.05 | 1.03 | 1.01 |
| 35 | 1.60 | 1.50 | 1.41 | 1.34 | 1.28 | 1.23 | 1.19 | 1.15 | 1.12 | 1.09 | 1.07 | 1.04 | 1.02 |
| 36 | 1.63 | 1.52 | 1.43 | 1.36 | 1.30 | 1.25 | 1.21 | 1.17 | 1.14 | 1.11 | 1.08 | 1.06 | 1.04 |
| 37 | 1.65 | 1.54 | 1.45 | 1.38 | 1.32 | 1.26 | 1.22 | 1.18 | 1.15 | 1.12 | 1.10 | 1.07 | 1.05 |
| 38 | 1.67 | 1.56 | 1.47 | 1.39 | 1.33 | 1.28 | 1.23 | 1.20 | 1.16 | 1.13 | 1.11 | 1.09 | 1.07 |
| 39 | 1.69 | 1.57 | 1.48 | 1.41 | 1.34 | 1.29 | 1.25 | 1.21 | 1.18 | 1.15 | 1.12 | 1.10 | 1.08 |
| 40 | 1.70 | 1.59 | 1.49 | 1.42 | 1.36 | 1.30 | 1.26 | 1.22 | 1.19 | 1.16 | 1.13 | 1.11 | 1.09 |
| 41 | 1.71 | 1.60 | 1.51 | 1.43 | 1.37 | 1.31 | 1.27 | 1.23 | 1.19 | 1.16 | 1.14 | 1.11 | 1.09 |
| 42 | 1.73 | 1.61 | 1.52 | 1.44 | 1.38 | 1.32 | 1.28 | 1.24 | 1.20 | 1.17 | 1.15 | 1.12 | 1.10 |
| 43 | 1.74 | 1.62 | 1.53 | 1.45 | 1.38 | 1.33 | 1.28 | 1.24 | 1.21 | 1.18 | 1.15 | 1.13 | 1.11 |
| 44 | | 1.63 | 1.53 | 1.46 | 1.39 | 1.34 | 1.29 | 1.25 | 1.22 | 1.19 | 1.16 | 1.14 | 1.11 |
| 45 | | | 1.54 | 1.46 | 1.40 | 1.34 | 1.30 | 1.26 | 1.22 | 1.19 | 1.16 | 1.14 | 1.12 |
| 46 | | | | 1.47 | 1.40 | 1.35 | 1.30 | 1.26 | 1.23 | 1.20 | 1.17 | 1.15 | 1.12 |
| 47 | | | | | 1.41 | 1.36 | 1.31 | 1.27 | 1.23 | 1.20 | 1.17 | 1.15 | 1.13 |
| 48 | | | | | | 1.36 | 1.31 | 1.27 | 1.24 | 1.21 | 1.18 | 1.15 | 1.13 |
| 49 | | | | | | | 1.32 | 1.28 | 1.24 | 1.21 | 1.18 | 1.16 | 1.14 |
| 50 | | | | | | | | 1.28 | 1.24 | 1.21 | 1.19 | 1.16 | 1.14 |
| 51 | | | | | | | | | 1.25 | 1.22 | 1.19 | 1.16 | 1.14 |
| 52 | | | | | | | | | | 1.22 | 1.19 | 1.17 | 1.14 |
| 53 | | | | | | | | | | | 1.19 | 1.17 | 1.15 |
| 54 | | | | | | | | | | | | 1.17 | 1.15 |
| 55 | | | | | | | | | | | | | 1.15 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 20.32 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.

Table A5-34. Factors for Calculating Trembling Aspen Merchantable Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.71 | 0.69 | 0.68 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.70 | 0.71 |
| 11 | 0.83 | 0.81 | 0.80 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.80 | 0.80 | 0.81 | 0.82 | 0.82 | 0.83 |
| 12 | 0.92 | 0.89 | 0.88 | 0.87 | 0.86 | 0.86 | 0.86 | 0.87 | 0.87 | 0.87 | 0.88 | 0.89 | 0.89 | 0.90 | 0.91 |
| 13 | 0.97 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 |
| 14 | 1.01 | 0.98 | 0.97 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.96 | 0.96 | 0.97 | 0.98 | 0.98 | 0.99 | 1.00 |
| 15 | 1.04 | 1.01 | 0.99 | 0.98 | 0.98 | 0.97 | 0.98 | 0.98 | 0.98 | 0.99 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 |
| 16 | 1.06 | 1.03 | 1.01 | 1.00 | 1.00 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.04 |
| 17 | 1.07 | 1.04 | 1.03 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.02 | 1.03 | 1.03 | 1.04 | 1.05 | 1.06 |
| 18 | 1.08 | 1.05 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 | 1.04 | 1.04 | 1.05 | 1.06 | 1.07 |
| 19 | 1.09 | 1.06 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 | 1.04 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 20 | 1.10 | 1.07 | 1.05 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 | 1.04 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 | 1.08 |
| 21 | 1.10 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.05 | 1.06 | 1.06 | 1.07 | 1.08 | 1.09 |
| 22 | 1.11 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.04 | 1.04 | 1.05 | 1.05 | 1.06 | 1.07 | 1.08 | 1.08 | 1.09 |
| 23 | 1.11 | 1.08 | 1.06 | 1.05 | 1.05 | 1.04 | 1.04 | 1.05 | 1.05 | 1.06 | 1.06 | 1.07 | 1.08 | 1.09 | 1.10 |
| 24 | 1.11 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 |
| 25 | 1.12 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.05 | 1.05 | 1.06 | 1.06 | 1.07 | 1.08 | 1.08 | 1.09 | 1.10 |
| 26 | 1.12 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.05 | 1.05 | 1.06 | 1.06 | 1.07 | 1.08 | 1.09 | 1.10 | 1.10 |
| 27 | 1.12 | 1.09 | 1.07 | 1.06 | 1.05 | 1.05 | 1.05 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 |
| 28 | 1.12 | 1.09 | 1.07 | 1.06 | 1.06 | 1.05 | 1.05 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 |
| 29 | 1.12 | 1.09 | 1.08 | 1.06 | 1.06 | 1.05 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 |
| 30 | 1.12 | 1.10 | 1.08 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.08 | 1.08 | 1.09 | 1.10 | 1.11 |
| 31 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.08 | 1.08 | 1.09 | 1.10 | 1.11 |
| 32 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.09 | 1.10 | 1.11 |
| 33 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.09 | 1.10 | 1.11 |
| 34 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.09 | 1.10 | 1.11 |
| 35 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.10 | 1.11 |
| 36 | 1.13 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.10 | 1.11 |
| 37 | | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 | 1.11 |
| 38 | | | 1.08 | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 | 1.11 |
| 39 | | | | 1.07 | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 40 | | | | | 1.06 | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 41 | | | | | | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 42 | | | | | | | 1.06 | 1.07 | 1.07 | 1.08 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 43 | | | | | | | | 1.07 | 1.07 | 1.08 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 44 | | | | | | | | | 1.07 | 1.08 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 45 | | | | | | | | | | 1.08 | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 46 | | | | | | | | | | | 1.08 | 1.09 | 1.10 | 1.11 | 1.12 |
| 47 | | | | | | | | | | | | 1.09 | 1.10 | 1.11 | 1.12 |
| 48 | | | | | | | | | | | | | 1.10 | 1.11 | 1.12 |
| 49 | | | | | | | | | | | | | | 1.11 | 1.12 |
| 50 | | | | | | | | | | | | | | | 1.12 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump and top dib 7.62 cm (tree length).

To obtain Merchantable Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-35. Factors for Calculating Trembling Aspen Shortwood Volume (m³/ha) at Different Merchantable QDBH. *

| QDBH (cm) | Total Lorey's Height of Merchantable Trees in Metres | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 10 | 0.41 | 0.43 | 0.45 | 0.47 | 0.49 | 0.50 | 0.51 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 |
| 11 | 0.58 | 0.59 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.67 | 0.68 | 0.69 | 0.70 | 0.71 | 0.72 | 0.73 | 0.74 |
| 12 | 0.69 | 0.70 | 0.71 | 0.72 | 0.73 | 0.74 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.83 |
| 13 | 0.77 | 0.77 | 0.78 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.83 | 0.84 | 0.85 | 0.86 | 0.87 | 0.88 | 0.89 |
| 14 | 0.82 | 0.82 | 0.83 | 0.83 | 0.84 | 0.85 | 0.85 | 0.86 | 0.87 | 0.88 | 0.89 | 0.90 | 0.91 | 0.92 | 0.94 |
| 15 | 0.87 | 0.86 | 0.86 | 0.87 | 0.87 | 0.88 | 0.89 | 0.89 | 0.90 | 0.91 | 0.92 | 0.93 | 0.94 | 0.96 | 0.97 |
| 16 | 0.90 | 0.89 | 0.89 | 0.89 | 0.90 | 0.90 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| 17 | 0.92 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 | 0.97 | 0.98 | 1.00 | 1.01 |
| 18 | 0.94 | 0.93 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 |
| 19 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 |
| 20 | 0.97 | 0.96 | 0.95 | 0.95 | 0.95 | 0.96 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 |
| 21 | 0.98 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 | 0.98 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 |
| 22 | 0.99 | 0.97 | 0.97 | 0.96 | 0.97 | 0.97 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 |
| 23 | 0.99 | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 | 0.98 | 0.99 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 |
| 24 | 1.00 | 0.98 | 0.98 | 0.97 | 0.97 | 0.98 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 |
| 25 | 1.00 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.99 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.06 |
| 26 | 1.01 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.99 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.06 |
| 27 | 1.01 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.99 | 0.99 | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.06 |
| 28 | 1.01 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.07 |
| 29 | 1.02 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.07 |
| 30 | 1.02 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.07 |
| 31 | 1.02 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.07 |
| 32 | 1.02 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.07 |
| 33 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 |
| 34 | 1.02 | 1.01 | 1.00 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 |
| 35 | 1.03 | 1.01 | 1.00 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.02 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 |
| 36 | 1.03 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.02 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 |
| 37 | | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.03 | 1.04 | 1.05 | 1.06 | 1.08 |
| 38 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.03 | 1.04 | 1.05 | 1.07 | 1.08 |
| 39 | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.04 | 1.06 | 1.07 | 1.08 |
| 40 | | | | | 1.00 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 41 | | | | | | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 42 | | | | | | | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 43 | | | | | | | | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 44 | | | | | | | | | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 45 | | | | | | | | | | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 46 | | | | | | | | | | | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 |
| 47 | | | | | | | | | | | | 1.05 | 1.06 | 1.07 | 1.08 |
| 48 | | | | | | | | | | | | | 1.06 | 1.07 | 1.08 |
| 49 | | | | | | | | | | | | | | 1.07 | 1.08 |
| 50 | | | | | | | | | | | | | | | 1.08 |

* Based on gross merchantable volume (solid wood, inside bark) with 0.15 m stump, top dib 7.62 cm, and 1.22 m subtracted from merchantable height.

To obtain Shortwood Volume (m³/ha), multiply factor by corresponding Merchantable Hardwood Volume (m³/ha) in Table 8.

Table A5-36. Factors for Calculating Trembling Aspen Sawlog Volume (m³/ha) at Different Sawlog QDBH. *

| QDBH (cm) | Total Lorey's Height of Sawlog Trees in Metres | | | | | | | | | | | | |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 22 | 0.39 | 0.37 | 0.36 | 0.34 | 0.34 | 0.33 | 0.32 | 0.32 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| 23 | 0.60 | 0.57 | 0.55 | 0.53 | 0.51 | 0.50 | 0.49 | 0.48 | 0.48 | 0.47 | 0.47 | 0.47 | 0.46 |
| 24 | 0.77 | 0.73 | 0.70 | 0.67 | 0.66 | 0.64 | 0.63 | 0.62 | 0.61 | 0.60 | 0.60 | 0.59 | 0.59 |
| 25 | 0.91 | 0.86 | 0.82 | 0.80 | 0.77 | 0.75 | 0.74 | 0.73 | 0.72 | 0.71 | 0.70 | 0.70 | 0.69 |
| 26 | 1.02 | 0.97 | 0.93 | 0.89 | 0.87 | 0.85 | 0.83 | 0.82 | 0.80 | 0.80 | 0.79 | 0.78 | 0.78 |
| 27 | 1.12 | 1.06 | 1.01 | 0.98 | 0.95 | 0.92 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.85 |
| 28 | 1.20 | 1.13 | 1.08 | 1.04 | 1.01 | 0.99 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.91 |
| 29 | 1.26 | 1.20 | 1.14 | 1.10 | 1.07 | 1.04 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.96 |
| 30 | 1.32 | 1.25 | 1.19 | 1.15 | 1.12 | 1.09 | 1.07 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | 1.00 |
| 31 | 1.37 | 1.29 | 1.24 | 1.19 | 1.16 | 1.13 | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.04 |
| 32 | 1.41 | 1.33 | 1.27 | 1.23 | 1.19 | 1.16 | 1.14 | 1.12 | 1.10 | 1.09 | 1.08 | 1.07 | 1.07 |
| 33 | 1.44 | 1.37 | 1.31 | 1.26 | 1.22 | 1.19 | 1.17 | 1.14 | 1.13 | 1.12 | 1.11 | 1.10 | 1.09 |
| 34 | 1.47 | 1.39 | 1.33 | 1.28 | 1.25 | 1.21 | 1.19 | 1.17 | 1.15 | 1.14 | 1.13 | 1.12 | 1.11 |
| 35 | 1.50 | 1.42 | 1.36 | 1.31 | 1.27 | 1.24 | 1.21 | 1.19 | 1.17 | 1.16 | 1.15 | 1.14 | 1.13 |
| 36 | 1.52 | 1.44 | 1.38 | 1.33 | 1.29 | 1.26 | 1.23 | 1.21 | 1.19 | 1.18 | 1.17 | 1.16 | 1.15 |
| 37 | 1.54 | 1.46 | 1.40 | 1.35 | 1.30 | 1.27 | 1.25 | 1.22 | 1.21 | 1.19 | 1.18 | 1.17 | 1.17 |
| 38 | 1.56 | 1.48 | 1.41 | 1.36 | 1.32 | 1.29 | 1.26 | 1.24 | 1.22 | 1.21 | 1.19 | 1.19 | 1.18 |
| 39 | 1.58 | 1.49 | 1.43 | 1.37 | 1.33 | 1.30 | 1.27 | 1.25 | 1.23 | 1.22 | 1.21 | 1.20 | 1.19 |
| 40 | 1.59 | 1.50 | 1.44 | 1.39 | 1.34 | 1.31 | 1.28 | 1.26 | 1.24 | 1.23 | 1.22 | 1.21 | 1.20 |
| 41 | 1.60 | 1.52 | 1.45 | 1.40 | 1.35 | 1.32 | 1.29 | 1.27 | 1.25 | 1.24 | 1.23 | 1.22 | 1.21 |
| 42 | 1.61 | 1.53 | 1.46 | 1.41 | 1.36 | 1.33 | 1.30 | 1.28 | 1.26 | 1.25 | 1.23 | 1.23 | 1.22 |
| 43 | 1.62 | 1.54 | 1.47 | 1.41 | 1.37 | 1.34 | 1.31 | 1.29 | 1.27 | 1.25 | 1.24 | 1.23 | 1.23 |
| 44 | | 1.54 | 1.48 | 1.42 | 1.38 | 1.34 | 1.32 | 1.29 | 1.28 | 1.26 | 1.25 | 1.24 | 1.23 |
| 45 | | | 1.48 | 1.43 | 1.39 | 1.35 | 1.32 | 1.30 | 1.28 | 1.27 | 1.25 | 1.25 | 1.24 |
| 46 | | | | 1.44 | 1.39 | 1.36 | 1.33 | 1.31 | 1.29 | 1.27 | 1.26 | 1.25 | 1.24 |
| 47 | | | | | 1.40 | 1.36 | 1.33 | 1.31 | 1.29 | 1.28 | 1.27 | 1.26 | 1.25 |
| 48 | | | | | | 1.37 | 1.34 | 1.32 | 1.30 | 1.28 | 1.27 | 1.26 | 1.25 |
| 49 | | | | | | | 1.34 | 1.32 | 1.30 | 1.29 | 1.27 | 1.26 | 1.26 |
| 50 | | | | | | | | 1.32 | 1.30 | 1.29 | 1.28 | 1.27 | 1.26 |
| 51 | | | | | | | | | 1.31 | 1.29 | 1.28 | 1.27 | 1.26 |
| 52 | | | | | | | | | | 1.30 | 1.28 | 1.27 | 1.27 |
| 53 | | | | | | | | | | | 1.29 | 1.28 | 1.27 |
| 54 | | | | | | | | | | | | 1.28 | 1.27 |
| 55 | | | | | | | | | | | | | 1.28 |

* Based on gross sawlog volume (solid wood, inside bark) with 0.15 m stump and top dib 20.32 cm (tree-length).

To obtain Sawlog Volume (m³/ha), multiply factor by corresponding Hardwood Sawlog Volume (m³/ha) in Table 10.