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**HEIGHT - DBH BIBLIOGRAPHY  
1932-Present**

**(70 Entries)**

1. Trorey, L.G. (1932) "A Mathematical Method for the Construction of Diameter Height Curves Based on Site." *The Forestry Chronicle*, 8: 121-132.
2. Stiell, W.M. (1965) "Height Sampling in Red Pine and White Spruce Plantations." *The Forestry Chronicle*, 41: 175-181.
3. Curtis, R. O. (1967) "Height-diameter and height-diameter-age equations for second-growth Douglas-fir." *Forest Science* 13(4): 365-375.
4. Ek, A. R. (1973). Performance of regression models for the tree height estimation with small sample sizes. IN: Statistics in Forestry Research, Proc. Of IUFRO Subject Group S6.02 meeting, Vancouver, B.C., Canada. August 1973.
5. Stout, B.B. (1973) "Height-Diameter Relations in Trees: An Examination of Greehill's Model." *A paper presented in a Joint Meetings S4.01 and S6.02 of International Union of Forest Research Organizations*, Vancouver, pp. 159 - 170.
6. Gideon, R.A and Faurot, J.L. (1977) "A Model Relating Merchantable Length to Tree Diameter and Height". *Forest Science*, 23: 143 – 150.
7. Hilt, D. E. and Dale, M. E. (1982) "Height Prediction Equations for Even-Aged Upland Oak Stands". Broomall, Pa.: Northeastern Forest Experiment Station, USDA Forest Services, *Research Paper NE-493*, p. 9.
8. Flewelling, J.W. (1983) "Estimation of Future Height Growth in Inventory Stands". *Research Report; Research and Development, Technical Report*, Weyerhaeuser. pp. 6
9. Ek, A.R., Birdsall, E.T. and Spears, R. J. (1984) "A Simple Model for Estimating Total and Merchantable Tree Heights". North Central Forest Experiment Station, USDA Forest Services, *Research Note NC-307*, pp. 5.
10. Wensel, L.C., Meerschaert, W.J., and Biging, G.S. (1987) "Tree Height and Diameter Growth Models for Northern California Conifers" *Hilgardia; A Journal of Agricultural Science Published by California Agricultural Experiment Station* 55 (8): 1-18
11. Wang, C. and Hann, D.W. (1988) "Height – Diameter Equations for Sixteen Tree Species in the Central Western Willamette Valley of Oregon" *Forest Research Laboratory, Oregon State University, Corvallis. Research Paper 51*. pg. 7
12. West, P. W., Beadle, C.L. and Turnbull, R. A. (1988) "Mechanistically based Allometric models to Predict Tree Diameter and Height in even-aged Monoculture of *Eucalyptus regnans* F. Muell." *Canadian Journal of Forest Research* 19: 270 - 273

13. Bormann, B.T. (1990) “Diameter – based Biomass Regression Models Ignore Large Sapwood-related Variation in Sitka Spruce.” *Canadian Journal of Forest Research* 20: 1098 - 1104.
14. Yaussy, D.A. and Dale, M.E. (1990) “Merchantable Sawlog and Bole-Length Equations for the Northeastern United States” *Research Paper NE-650. Radnor, PA: USDA Forest Services, Northeastern Forest Experiment Station.* pp. 7.
15. Omule, S.A.Y. and Macdonald, R.N. (1991) “Simultaneous Curve Fitting for Repeated Height-Diameter Measurements.” *Can. Journal For. Res.* 21:1418-1422
16. Arabatzis, A.A and Burkhart, H.E. (1992) “An Evaluation of Sampling Methods and Model Forms for Estimating Height-Diameter Relationships in Loblolly Pine Plantations.” *Forest Science*, 38: 192-198.
17. Huang, S., Titus, S.J., and Wiens, D.P. (1992) “Comparison of Nonlinear Height – Diameter Functions for Major Alberta Tree Species.” *Canadian Journal of Forest Research* 22: 1297-1304
18. Parresol, B.R. (1992) “Baldcypress Height-Diameter Equations and their Prediction Confidence Interval.” *Canadian Journal of Forest. Research* 22: 1429 – 1434
19. Houghton, D.R. and Gregoire, T.G. (1993) “Minimum Subsamples of Tree Heights for Accurate Estimation of Loblolly Pine Plot Volume.” *Southern Journal of Applied Forestry*, 17 (3): 124-129
20. Flewelling, J.W., and Jong, R. (1994) “Considerations in Simultaneous Curve Fitting for Repeated Height-Diameter Measurements.” *Canadian Journal of Forest Research* 24: 1408-1414
21. Knowe, S.A. (1994) “Effect of Competition Control Treatments on Height-Age and Height-Diameter relationships in young Douglas-fir plantations.” *Forest Ecology and Management* 67: 101-111
22. Oswald, B.P., Zhang, L., Green, T.H., and Stout, S.L. (1994) “Height – Diameter relationships of Dominant Trees in the Mixed Upland Hardwood Forests of North Alabama.” *A Paper presented at the Eighth Biennial Southern Silvicultural Research Conference, Auburn, AL, Nov. 1-3.*
23. Zakrzewski, W.T., and Ter-Mikaelian, M. (1994) “New Application of a Polynomial Curve to Plot Volume Estimation.” *Canadian Journal of Forest Research* 24: 1083-1088

24. Knowe, S.A., Carrier, B.D., and Dobkowski, A. (1995) “Effects of Bigleaf Maple Sprout Clumps on Diameter and Height Growth of Douglas-Fir.” *Western Journal of Applied Forestry*, 10 (1):5-11.
25. O’Brien, S.T., Hubbell, S. P., Spiro, P., Condit, R. and Foster, R.B. (1995) “Diameter, Height, Crown and Age relationships in Eight Neotropical Tree Species.” *Ecology* 76 (6): 1926 – 1939.
26. Kunisaki, T. and Imada, M. (1996) “DBH – Height Relationship for Japanese Red Pine (*Pinus densiflora*) in Extensive Natural Forests in Southern Japan.” *Journal of Forest Planning* 2:115-123
27. Moore, J.A., Zhang, L. and Stuck, D. (1996) “Height – Diameter Equations for Ten Tree Species in the Inland Northwest.” *Western Journal of Applied Forestry*, 11(4): 132-137.
28. Hokka, H. (1997) “Height-Diameter curves with random intercepts and slopes for Trees growing on drained peatlands.” *Forest Ecology and Management* 97:63-72
29. Zhang, L. (1997) “Cross – validation of Non-linear Growth Functions for Modeling Tree Height-Diameter Relationships.” *Annals of Botany* 79: 251-257
30. Zhang, S., Burkhardt, H.E. and Amateis, R. L. (1997) “The Influence of Thinning on Tree Height and Diameter Relationships in Loblolly Pine Plantations.” *Southern Journal of Applied Forestry* 21 (4): 199-205
31. Xiaoxian, Z., Donglan, L., Yuhong, L. and Xinmin, S. (1997) “Formulae of tree height curve and volume curve derived from theory of column buckling.” *Journal of Forest Research* 8(2): 91-93
32. Bechtold, W.A., Zarnoch, S.J. and Burkman, W.G. (1998) “Comparisons of Modeled Height Predictions to Ocular Height Estimates” *Southern Journal of Applied Forestry* 22 (4): 216-221
33. Martin, F.C. and Flewelling, J.W. (1998) “Evaluation of Tree Height Prediction Models for Stand Inventory.” *Western Journal of Applied Forestry* 13 (4): 109-119.
34. Huang, S. (1999) “Ecoregion-Based Individual Tree Height – Diameter Models for Lodgepole Pine in Alberta.” *Western Journal of Applied Forestry* 14 (4): 186 – 193
35. Tewari, V.P. and v. Gadow, K. (1999) “Modelling the relationship between Tree Diameters and Heights using  $S_{BB}$  Distribution.” *Forest Ecology and Management* 119: 171 – 176 (missing pages: see **SBB S<sub>BB</sub> Folder**)

36. Zucchini, W. and MacDonald, I.L. (1999) “Illustrations of the Use of Pseudo-Residuals in Assessing the Fit of a Model.” In *Proceedings of the 14<sup>th</sup> International Workshop on Statistical Modelling, Graz, Austria*. pp. 409 - 416
37. Hanus, M.L., Hann, D.W. and Marshal, D.D. (2000) “Predicting Height to Crown Base for Undamaged and Damaged Trees in Southwest Oregon”. *Forest Research Laboratory, Oregon State University, Corvallis. Research Contribution 29*. pg. 35
38. Staudhammer, C. and Leemay, V. (2000) “Height prediction equations using Diameter and Stand Density Measures.” *The Forestry Chronicle 76 (2): 303 – 309*.
39. Gilmore, D.W. (2001) “Equations to Describe Crown Allometry of Larix require local validation.” *Forest Ecology and Management 148: 109-116*.
40. Jayaraman, K. and Zakrzewski, W.T. (2001) “Practical Approaches to Calibrating Height-Diameter relationships for Natural Sugar Maple Stands in Ontario.” *Forest Ecology and Management 148: 169-177*.
41. Peng, C. (2001) “Developing and validating nonlinear height-diameter models for major tree species of Ontario’s Boreal Forests.” *Northern Journal of Applied Forestry 18 (3): 87-94*.
42. Wonn, H.T. and O’Hara, K.L. (2001) “Height: Diameter Ratios and Stability Relationships for Four Northern Rocky Mountain Tree Species.” *Western Journal of Applied Forestry 16 (2): 87-94*
43. Yuancai, L. and Parresol, B.N. (2001) “Remarks on Height-Diameter Modeling.” *Research Note SRS - 10. USDA Forest Services, Southern Research Station*. pp. 5.
44. Zucchini, W., Schmidt, M. and v. Godow, K. (2001) “A Model for the Diameter-Height Distribution in an Uneven-Aged Beech Forest and a Method to Assess the Fit of Such Models.” *Silva Fennica 35 (2): 169-183*.
45. Colbert, K.C., Larsen, D.R. and Lootens, J.R. (2002) “Height – Diameter Equations for Thirteen Midwestern Bottomland Hardwood Species.” *Northern Journal of Applied Forestry 19 (4): 171-176*.
46. Li, F., Zhang, L., and Davis, C.J. (2002) “Modeling the Joint Distribution of Tree Diameter and Heights by Bivariate Generalized Beta Distribution.” *Forest Science 48 (1): 47-58*.
47. Vanderschaat, C. and Zeide, B. (2002) “The Effect of Density on the Height-Diameter Relationship.” In: *Proceedings of the Eleventh Biennial Southern Silvicultural Research Conference (Asheville, NC) U. S. Forest Service General Technical Report SRS-48*.

48. Temesgen, H. and v. Gadow, K. (2003). “Generalized height-diameter models- an application for major tree species in complex stands of interior British Columbia.” *European Journal of Forest Resources* 123: 45-51.
49. Calama, R. and Montero, G. (2004) “Interregional Nonlinear Height – Diameter Models with Random Coefficients for Stone Pine in Spain.” *Canadian Journal of Forest Research* 34: 150-163.
50. Inoue, A. and Yoshida, S. (2004) “Allometric Model of Height – Diameter Curve for Japanese cedar (*Cryptomeria japonica* D. Don) Even – Aged Stands.” *Journal of Forest Research* 9: 2-16
51. Mehtalalo, L. (2004) “A Longitudinal Height-Diameter Model for Norway Spruce in Finland.” *Canadian Journal of Forest Research*, 34: 131-140.
52. Nanos, N., Calama, R., Montero, G., and Gil, L. (2004) “Geostatistical Prediction of Height/Diameter Models.” *Forest Ecology and Management* 195: 221 - 235.
53. Robinson, A. P. and Wykoff, W. R. (2004) “Imputing missing height measures using a mixed-effects modeling strategy.” *Canadian Journal of Forest Research* 34:2492-2500.
54. Sharma, M. and Zhang, S. Y. (2004) “Height – Diameter Models Using Stand Characteristics for *Pinus banksiana* and *Picea mariana*” *Scandinavian Journal of Forest Research* 19: 442 – 451.
55. Temesgen, H. and Gadow, K. v. (2004) “Generalized height-diameter models- an application for major tree species in complex stands of interior British Columbia.” *European Journal of Forest Resources* 123:45-51.
56. Zhang, L., Bi, H., Cheng, P. and Davis, C.J. (2004) “Modeling Spatial Variation in Tree Diameter – Height Relationships.” *Forest Ecology and Management* 189: 317-329.
57. Lynch, T.B., Holley, A.G. and Stevenson, D.J. (2005) “A Random-Parameter Height-Dbh Model for Cherrybark Oak.” *Southern Journal of Applied Forestry* 29(1): 22-26.
58. Mehtalalo, L. (2005) “A Height-Diameter Model for Scots Pine and Birch in Finland.” *Silva Fennica* 39 (1): 55-66.
59. Dorado, F. C., Dieguez-Aranda, U., Anta, M. B., Rodriguez, M. S. and v. Gadow, K. (2006) “A generalized height-diameter model including random components for radiata pine plantations in northwestern Spain.” *Forest Ecology and Management* 229: 202-213.
60. Temesgen, H., Hann, D.W. and Monleon, V.J. (2007) “Regional Height-Diameter Equations for Major Tree Species of Southwest Oregon.” *Western Journal of Applied Forestry* 22(3): 213-219.

61. Adame, P., Rio, M. del and Canellas, I. (2008) “A mixed nonlinear height-diameter model for Pyrenean oak (*Quercus pyrenaica* Wild.).” *Forest Ecology and Management* 256: 88-98.
62. Temesgen, H. Monleon, V.J. and H., Hann, D.W. (2008) “Analysis and comparison of nonlinear tree height prediction strategies for Douglas-fir forests.” *Canadian Journal of Forest Research* 38: 553-565.
63. Wang, M., Rennolls, K. and Tang, S. (2008) “Bivariate Distribution Modeling of Tree Diameters and Heights: Dependency Modeling Using Copulas.” *Forest Science* 54 (3): 284-293.
64. Brandeis, T. J., Randolph, K. C. and Strub, M. R. (2009) “ Modeling Caribbean tree stem diameters from tree height and crown width measurements.” *International Journal of Mathematical and Computational Forestry & Natural Resources* 1(2): 78-85.
65. Carlson, C. A., Fox, T. R., Burkhart, H. E., Allen, H. L., and Albaugh, T. J. (2009). Accuracy of subsampling for height measurements in loblolly pine plots. *Southern Journal of Applied Forestry* 33(3) 145-149.
66. Rupsys, P. and Petraukas, E. (2010). “The bivariate Gompertz diffusion model for tree diameter and height distribution.” *Forest Science* 56(3): 271-280.
67. Vospernik, S. Monserud, R. A. and Sterba, H. (2010) “Do individual-tree growth models correctly represent height:diameter ratios of Norway Spruce and Scots pine?” *Forest Ecology and Management* 260: 1735-1753.
68. Wang, M. Upadhyay, A. and Zhang, L. (2010). “Trivariate distribution modeling of tree diameter, height, and volume.” *Forest Science* 56(3): 290-300.
69. Cimini, D. and Salvati, R. (2011) “Comparison of generalized nonlinear height-diameter models for *Pinus halepensis* Mill. and *Quercus cerris* L. in Sicily (Southern Italy).” *Italian Journal of Forest and Mountain Environments* 66(5): 395-400.
70. Burkhart, H. E. and Tome, M. (2012) “12.2 Modeling height-diameter relationships.” 13pp