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World Forest Biomass and Primary Production Data

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P R E F A C E

This book has been produced as a reference document for research workers, foresters, ecologists and all those interested in the structure, function and dry matter production of forest stands. It assembles published data abstracted from about 600 papers on the dry biomass of stems, branches and foliage and some components of the net primary production of over 1200 forest stands in 46 countries - where production means the *current* annual increment in standing biomass plus annual litterfall, mortality and consumption. An attempt has been made to include most of the major studies published in the western and Japanese literature up to mid-1981, including the period of the International Biological Programme. All types of woody plant stands are included, ranging from oak woodlands and coniferous plantations to tropical rainforests and mangrove swamps. Values are also given for bamboos, some shrub stands and oil palm, rubber and tea plantations. It would be foolish to claim that the literature has been covered exhaustively, but this book does give a much more comprehensive coverage than hitherto available. Each table has the same simple format, and in most instances footnotes have been added so that readers may avoid some of the pitfalls in interpretation and may decide whether they need to refer to the original publications.

The world literature on forest biomass and production expanded rapidly in the 1960s and 1970s, and in 1981 *Forestry Abstracts* listed about eight new titles per month. Before planning further studies it is important that researchers take stock of the large data base that already exists. This was the main reason for undertaking this compilation. Also, researchers often need to search the literature for particular, comparable or contrasting studies, or to establish the range of some critical variables or relationships. The data in this book have been formatted and indexed with those tasks in mind.

Inevitably some important studies may have been overlooked; if so, I apologise to the authors. For those studies that are included, I take full responsibility for having correctly abstracted and interpreted the published data, because it was not feasible to contact all the authors. However, I am grateful to the following authors for their help in locating the literature and/or for providing additional information: P.B. Alaback, A. Albrektson, T. Ando, P.M. Attiwell, D. Auclair, D.I. Bevege, M. Cantiani, A. Clark, A.W. Cooper, R.N. Cromer, T.R. Crow, J. van der Drift, O.J. Eong, J.F. Franklin, R.H. Gardner, S. Greene, C.C. Grier, D.F. Grigal, D. Hanley, R.K. Hermann, H.Z. Hitchcock, H. Hytteborn, Y. Katazawa, S. Kawanabe, J.P. Kimmins, M. Kimura, T. Kira, H. Klinge, J.N. Long, A.E. Lugo, D.A. MacLean, H.A.T. Madgwick, H.G. Miller, E.W. Mogren, C.D. Monk, L. Olsvig-Whittaker, E. Paavilainen, J. Pardé, D.E. Reichle, R.W. Rogers, G. de las Salas, P.A. Sanchez, T. Satoo, K.P. Singh, G.L. Switzer, Y. Tadaki, E.V.J. Tanner, J. Turner, W.E. Westman, H.E. Young and J. Zavitkovski.

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