Measurement and Analysis Issues for Complex Stands

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Abstract

Stands with multiple species and ages, and irregular spatial patterns have been termed complex stands by some authors, and irregular stands by others. Because of the high variability in space and time for these complex stands, growth and yield and other measures of stand changes have been difficult to measure and to monitor. Experiments in these stands have also been difficult to establish, since very large experimental units are needed to capture variability. The recent trend towards more partial cutting and mixed species plantations popular in many countries, have resulted in more of these complex stands, and more possibly more spatial diversity within stands than would have been present in naturally complex stands.

In this paper, we discuss some of the measurement and analysis issues for these complex stands, and possible approaches to solving them. The need for long term monitoring is emphasized. The paper was based on the results of a recent IUFRO workshop held in Switzerland to discuss these issues.