

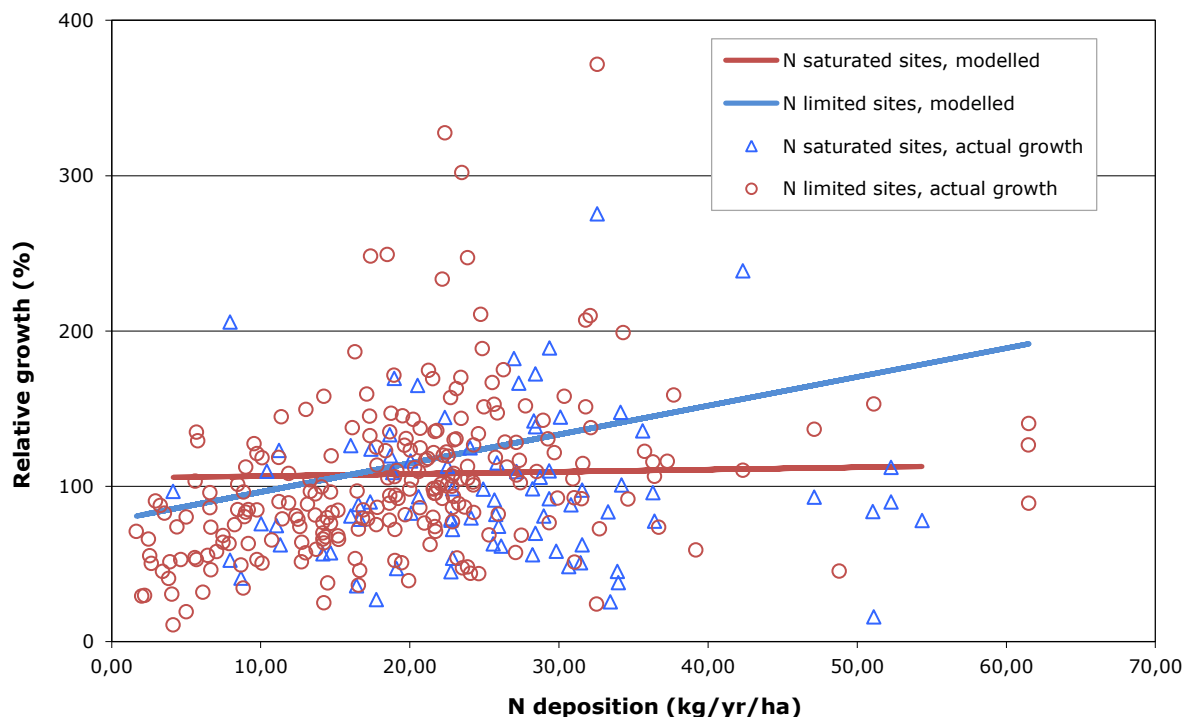
## Deposition and tree growth

Based on existing long-term and intensive forest monitoring data forest growth has been evaluated for 822 plots in 30 European countries. Data include information on breast height diameter of all trees, heights of selected trees and plot area. For nearly 600 plots re-measurements were available within different measurement intervals.

Results show stocking wood volumes between 300m<sup>3</sup>/ha and 600m<sup>3</sup>/ha for most plots with higher volumes for plots in the Alps and lower volumes in the northern and southern regions. Low increments are located in the south and north whereas the plots in Spain show very low increments. The results provide a unique overview on forest growth based on standardized measurements. They are a valuable basis for future validation, refinement or creation of forest growth models, for the determination of growth responses to site and environmental conditions and their changes and for the estimation of harvestable wood and potential stocking biomass in European forests under different management scenarios.

The calculated forest increment for the first five year period (1994-1999) was used to test if current growth deviates from the expected growth based on stand site condition, stand density and stand age and if environmental factors, such as nitrogen deposition or temperature increase, can explain these growth deviations. Nitrogen deposition and above-average temperature had a positive effect on tree growth. However, on soils with already higher nitrogen content nitrogen deposition had almost no effect.

Further information and discussion of results are available in [FutMon Scientific Report](#)



Relative growth increase of all species combined on N saturated sites and N limited sites with modelled trend based on an analysis of covariate.