Gabler, K. & Schadauer, K. (2008): Methods of the Austrian Forest Inventory 2000/02. Origins, approaches, design, sampling, data models, evaluation and calculation of standard error. BFW-Berichte 142, 121 pp.

Reference

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Short reference

Gabler & Schadauer (2008)

First author

Gabler, K.

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Abstract

Methods of the Austrian Forest Inventory 2000/02
Origins, approaches, design, sampling, data models, evaluation and calculation of standard error
K. Gabler, K. Schadauer

Abstract

This publication of the Department Forest Inventory concentrates on substantial elements regarding the origins of the Austrian Forest Inventories with emphasis on terrestrial data survey and computational interpretation including evaluation and standard error calculation. Historical examples and ancient sampling methods setting the basis for the currently used design of the Austrian Forest Inventory are described. Most of the used volume and form factor functions as well as height increment and D03H models with approaches and regression coefficients developed for each inventory period are presented. The figures for data collection describe the sampling grid of clusters with the sample plots and lines, stand and site characteristics including data on sample trees and measuring tools and units used. Special surveys on regeneration, dead wood and forest infrastructure are described in more detail as they have been surveyed under new aspects only from 1992 onwards and the methods have not yet been

completed. Data interpretation includes formulae for the calculation of forest area as well as for values per hectare and for total values of growing stock, increment, harvesting and number of stems. The evaluation of the forest road network is based on the approach by Matérn (1964). To evaluate regeneration data (including browsing damage) a special calculation scheme is used. For lying dead wood (stumps and logs) the calculation is relatively simple. This scheme is susceptible to refinement in the future. Volume calculation of standing dead trees is done in the same way as for the other sample trees. In addition, a few special features of Austrian Forest Inventories such as the "Nullteilung" of areas as well as the "Braun'sche Ansatz" (approach by Braun) is discussed in detail.

methodology: analysis, statistics
methodology: survey, inventory, monitoring
methodology: modelling
Notes

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Tartalom:

forest, forest inventory, cluster sampling, subdivision of plots, line survey, height increment, volume and form factor functions of trees, evaluation and calculation of standard error

Címszavazva - GE

Tue, 10/11/2011 - 12:00