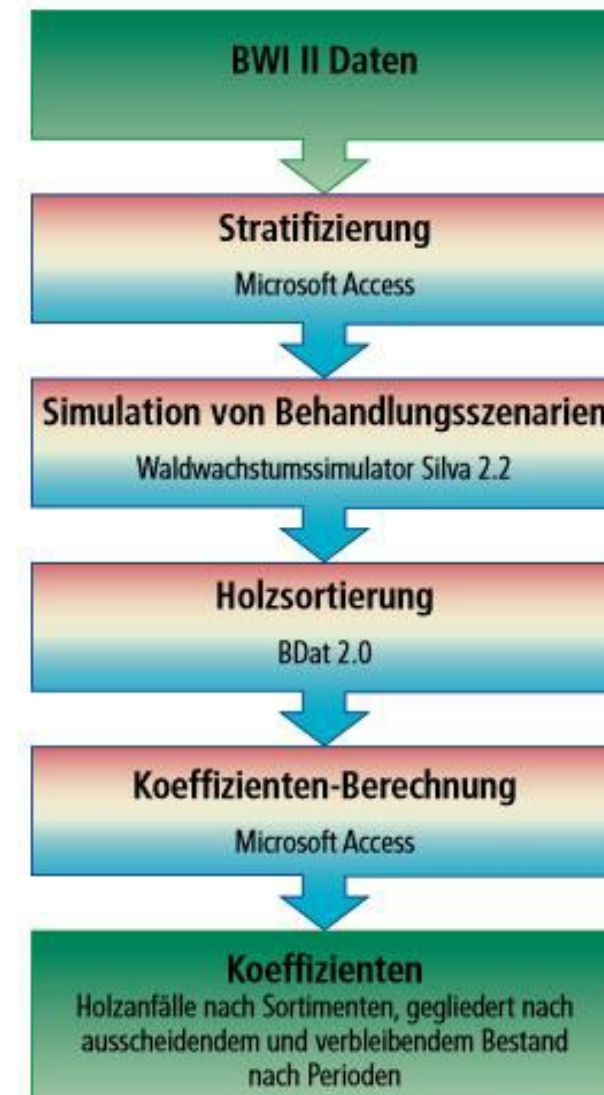# Natural and financial indicators for the consultation of private and communal forest owners

The basic idea is the processing of natural and financial data for typical forest stands and selected forest treatment alternatives after previous simulation calculations. Thereby, the question initially was limited to the depiction of the alternatives "thinning" or "without thinning".

This prototype can be complemented with additional indicators; other areas and forest treatment strategies and therefore more data should be added and furthermore more risk integration has to be done

The sorted single tree data then were condensed to coefficients via MS Access queries. The coefficients contain information about the arising amounts of wood of the simulated treatments or rather the timber stock of the remaining stands – sorted into sorts of wood and simulation period. After feeding the data to the consultation support system, a connection to current prices for timber and timber harvesting costs was established. Based on the data from the second National Forest Inventory, the stratification of the area of the Bavarian "Tertiäres Hügelland" and the compilation of simulation stocks was carried out. Using the forest growth simulator Silva 2.2, the simulation stocks were updated once without treatment and once updated according to a thinning scheme. In the next step, the results of the simulation runs (single tree data for the remaining and the outgoing stock) were sorted according to regional sorting criteria using the sorting program BDat 2.0.

DETAILS

HERKUNFT DES HOLZES

Wald

ART DES HOLZES

Stammholz

ART DES BETROFFENEN HOLZES

Stemwood

AUSWIRKUNGEN AUF UMWELT UND BIODIVERSITäT

Positive on biodiversity and forest resilience enhancement

EINKOMMENSEFFEKT

Positive / more efficient working processes / cost reduction possibility identification

VERWERTUNGSPOTENZIAL

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NABE

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WIRTSCHAFTLICHE AUSWIRKUNGEN

An active learning of different silvicultural approaches for forest owners can be achieved. But cost effects are hardly to describe.

MOBILISIERUNGSPOTENZIAL

Area affected is small but information about advantages of thinnings regarding risks can contribute on a wider level (estimated more than 1 m3/ha)

POTENZIAL FüR NACHHALTIGKEIT - WERT

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LEICHTE IMPLEMENTIERUNG

Difficult as an expert tool

LEICHTE IMPLEMENTIERUNG - BEWERTUNG

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WICHTIGE VORAUSSETZUNGEN

Just In cooperation with TUM possible

ART DER VERANSTALTUNG, AUF DER DIESE BPI VORGESTELLT WURDE

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ARBEITSPLATZEFFEKT

Better qualified staff through verification and discussion possibilities

KOSTEN DER IMPLEMENTIERUNG (EURO - €)

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SPEZIFISCHES WISSEN ERFORDERLICH

The system is depending on complex program Silva 2.2 – forest experts of TUM have to be included

MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG

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DOMäNE

Waldmanagement, Waldbau, Ökosystemleistungen, Resilienz

ART DER LöSUNG

Modellierung, DSS, Simulation, Optimierung

SCHLüSSELWöRTER

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DIGITALE LöSUNG

Ja

INNOVATION

Nein

HERKUNFTSLAND

Deutschland

UMFANG DER ANWENDUNG

Regional/sub-national

ANFANGS- UND ENDJAHR

2009 - 2009

KONTAKTDATEN

EIGENTüMER ODER AUTOR

Thomas.knoke@mytum.de

REPORTER

REFERENCES AND RESOURCES

HAUPT-WEBSITE

https://mediatum.ub.tum.de/doc/829183/document.pdf

RESSOURCEN

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PROJEKT-WEBSITE

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PROJEKT-REFERENZ

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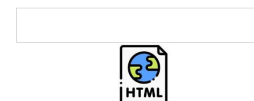
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