

Georg Josef WILHELM

Management of Wild Service for premium timber

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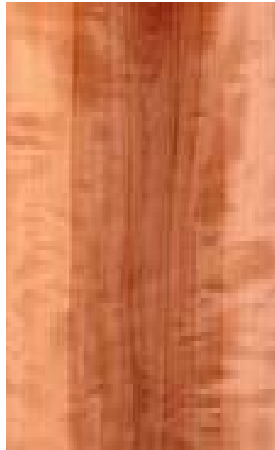
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Saint-Avoid
2007:

9.013 €/m³
over bark



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!!! But:
Loss in value down to
< 300 €/m³ for
- otherwise best and largest -
logs with greyish-brown heart!!!

???Is it possible to
avoid this discoloration
by slick management???

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> 80 % of all Sorbus-
veneers come from
Europe

➤ 80 % of European Sorbus
veneers come from NE-
France

➤ Nearly all of them
originate from former
coppices-with-standards



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Autecology

- **Shade tolerance:**
 > ash, oak, cherry
 = maple, lime, hornbeam / < beech
- **Final height: 18 to 26 (35) m**
- **High demands for nutrients**
- **Rather high thermal requirements**
- **Excellent drought tolerance**
- **Good tolerance oxygen deficiency**

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Synecology

- **Wild service is not able to withstand in Fageta**
Final height and shading of beech
- **Wild service endures in Carpineta**
no elimination by oak, hornbeam, field maple, lime

**Wild service is able to
outlast for more than 100 years under oak canopy
and then, after gaining free light,
to produce ring-widths of more than 3 mm**

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Temptation:
Selection of many wild services as target trees

But:
Sorbus are notoriously prone to pests
with fire blight as an extremely dangerous threat!

So: Temperance!

Wise management target for Wild service....

Premium quality
in a maximum of 5 (8) crop trees per ha
with low input

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Premium quality.....

knotless layer of > 20 cm
without discoloration

No selection of V-forked trees!
Prevent late branch dying!

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Integration of the premium production into development phases of trees

- **Establishing**
- **Qualifying**
- **Dimensioning**
- **Maturing**

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Establishing phase

**Preferably
originating from seeds or suckers**

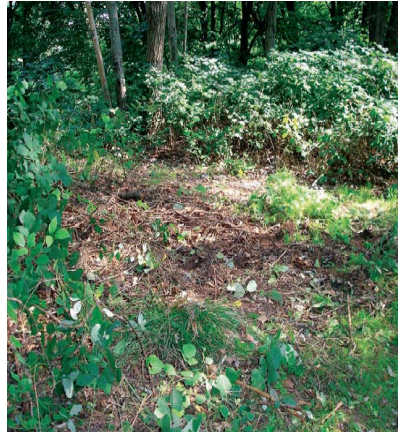
**If needed
by planting of 1(2) year old seedlings:**

**2 to 4 wild services
accompanied by 15 hornbeams or hazels
in 10 to 20 clumps/ha of 5 to 7 m in diameter**

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**Dosage of vegetal
concurrence:**

**only manually
in „clumps“**



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Prevention of deer browsing

**individual tree protection
only in clumps;**

- **maybe by shelters**
- **better not by fencing (too expensive, not sure)**



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Qualification phase

Natural process: Severe competition – Emerging **supervitals**

Management aim:

- sufficient **options** (twenty are plenty)
- (self-) pruning

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Activities: only if necessary

Supervital?

Option?

Apex overgrown?
Breaking or girdling



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Dimensioning phase

- **Selection of crop trees among the supervitals**
- **Permanent crown base at 25 % of the final height: no more dying back of branches at the grown base of crop trees**
- **Minimum distances of 12 (15) m to the next crop tree**

**Nature chooses on vitality –
man adds his choice on quality**

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Dimensionierung of Wild service

- **Qualification at the age of about 20 years**
- **Dimensioning until the age of 60 years**

.....40 decisive years for premium

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Dimensioning

Further steps: Keeping the crown basis

Crown freeing until the age of 60 years every 4 to 7 years

- **Maximising the crown length**
- **Optimising the center of gravity**
- **Minimising the time till target diameter**
- **Maximising the return on investment**

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Maturing phase

from 60 years till harvest

Current height growth slowing down

Crown expansion capacity slowing down

Management impact limited

Tolerance among overstorey trees

Maturing phase

Attention to

- shade tolerant trees growing up at the periphery of maturing trees
- light demand of natural regeneration
- harvest indication due to decline in timber quality
- harvest execution with regard to risk of damage to the understorey trees

- Wild service nr. 267: in the understorey until about 60 years with mean ring width of 1,4 mm; harvest of the oak in the overstorey; mean ring width in the 10 following years: 3,6 mm
- Wild service nr. 120: in the understorey until about 95 years with mean ring width of 0,6 mm; harvest of the oak in the overstorey; mean ring width in the 30 following years: 2,0 mm

