THE CHALLENGE OF ASH-DIEBACK

A conceptual framework for practitioners in the Ortenaukreis
(State of Baden-Württemberg/Germany)

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• Ortenaukreis a focus of distribution of ash (Fraxinus excelsior) in SW-Germany:

• 3000 ha of the common tree mostly between Black Forest and Rhine valley

• severe problems with ash die-back beginning in 2009

• die-back of the canopy of trees

• root infection causes instability (risk of unpredictedly falling trees)

• danger of collapse of the timber market for ash

• heavy pressure on the economy of the forest owners (mostly communities)

• a big challenge to the forest staff concerning forest use and reforestation of clearing areas

• a working group of the forest office designs a conceptual framework to support foresters in their management decisions and improve communication with forest owners

• framework consisting of two parts: management of cutting operations in the damaged stands and reafforestation of cleared stands
**Decision tree: cutting operation**

1. **Ash tracts with liability for premises?**
   - Plan safety-clearing or safety-thinning

2. **Check current timber market condition:**
   - Ash-masses/assortments marketable?

3. **Work safety guaranteed in all stands?**
   - Shut down stands temporarily

4. **Restrictions under nature Conservation law (SAC, protected biotope)?**
   - Clarify operation with the lower nature conservation agency (UNB)

5. **Decision matrix Owner’s objective**
6. **Determine processing sequence for stands**
7. **Sufficient work capacity available?**
   - Employment of contractors possible?
   - Plan clearing or thinning

8. **Documentation of the cutting operation**
**Table 1.** Fictitious community “Profit Town” – Cutting operation

<table>
<thead>
<tr>
<th>Relevant criteria for the decision-making&lt;sup&gt;1&lt;/sup&gt;</th>
<th>++</th>
<th>Preservation of healthy ashes and mixed tree species</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit from timber harvesting</td>
<td>++</td>
<td>Preservation of old and dead wood</td>
<td>-</td>
</tr>
<tr>
<td>Follow-up costs</td>
<td>++</td>
<td>Spatial structural diversity</td>
<td>-</td>
</tr>
<tr>
<td>Sustainability of quality wood production</td>
<td>++</td>
<td>Recreational value</td>
<td>-</td>
</tr>
<tr>
<td>Protection of the secondary stand</td>
<td>+</td>
<td>Fuel wood supply</td>
<td>+</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Action alternative&lt;sup&gt;2&lt;/sup&gt;</th>
<th>With nat. regen.&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Without nat. regen.&lt;sup&gt;3&lt;/sup&gt;</th>
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</thead>
<tbody>
<tr>
<td>Remaining quality wood&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1) Thinning</td>
<td>1) Thinning</td>
</tr>
<tr>
<td></td>
<td>2) Clearing, Temporary shut-down</td>
<td>2) Clearing</td>
</tr>
<tr>
<td>No remaining quality wood&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1) Thinning, Clearing</td>
<td>1) Clearing</td>
</tr>
<tr>
<td></td>
<td>2) Temporary shut-down</td>
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<td></td>
<td>3) Temporary shut-down</td>
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</table>
The main criteria for the selection of introduced, non-native tree species are:

1. adapted to certain site conditions

2. good increment

3. resistance to pests and diseases spread presently

4. good general quality of timber with existing or promising good prospects on the timber market

5. non-invasive behaviour of the species

The following tree genera and species were chosen as a result of the selection:
THANKS
FOR YOUR
ATTENTION