DANUBEPARKS STEP 2.0
Anchoring the Danube River Network of
Protected Areas as Platform for Preservation of Danube Natural Heritage

Current practices in management of black poplar in Croatia

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Content of presentation

- Distribution and quantity of black poplar in Croatia
- Activities of protection
- Activities in NP Lonjsko polje within the project
Distribution of forests in Croatia

Area of about 2.7 million hectares
47 % of terrestrial territory
Distribution of willows and poplars

Habitats of willows and poplars can be found mostly along rivers: Danube, Drava, Sava and Kupa.
Distribution of willows and poplars

Black poplar can be found in all flooded forests of black alder, ash and slavonian oak.
## Quantity of black poplar

Black poplars in management plans

<table>
<thead>
<tr>
<th>Management Units</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compartments</td>
<td>32</td>
</tr>
<tr>
<td>Stands</td>
<td>549</td>
</tr>
<tr>
<td>Trees</td>
<td>23,500</td>
</tr>
<tr>
<td>Total Volume (m³)</td>
<td>208,000</td>
</tr>
</tbody>
</table>

Lot of black poplar can be found in management classes: *Domestic poplars* and *Other softwood*
Distribution of willows and poplars
Most of the activities in protection of black poplars have been done within project EUFORGEN since 1995. 113 clones were selected and stored in nurseries. Two of them are core clones.
Two special reserves of black poplar
Area of about 250 ha
Activities in PN Lonjsko polje

- **GIS individual populations of black poplar trees in the Lonjsko Polje Nature Park into the national mapping system (HTRS/TM96)**
- **Collected and measured leaves from 30 trees for morphological analysis**
- **Collected, prepared and sent samples for molecular (genetic) analysis**
Activities in PN Lonjsko polje

95 trees have been recorded for further investigations.
Activities in PN Lonjsko polje

25 groups of trees have been recorded for further investigations.
Activities in PN Lonjsko polje

From 30 trees 60 leaves are collected for morphological analysis
Activities in PN Lonjsko polje

All leaves were measured according to protocol and scanned for further analysis and control.
**Activities in PN Lonjsko polje**

Basic statistics for the leaves from Lonjsko polje

<table>
<thead>
<tr>
<th></th>
<th>a / mm</th>
<th>b / mm</th>
<th>c / mm</th>
<th>d / °</th>
<th>e / mm</th>
<th>f / mm</th>
<th>g / mm</th>
<th>h / count</th>
<th>i / count</th>
</tr>
</thead>
<tbody>
<tr>
<td>count</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>average</td>
<td>89,19</td>
<td>74,39</td>
<td>55,41</td>
<td>40,47</td>
<td>7,07</td>
<td>25,09</td>
<td>144,25</td>
<td>4,66</td>
<td>4,67</td>
</tr>
<tr>
<td>median</td>
<td>87,61</td>
<td>73,74</td>
<td>53,88</td>
<td>42,23</td>
<td>5,79</td>
<td>25,28</td>
<td>142,72</td>
<td>4,61</td>
<td>4,58</td>
</tr>
<tr>
<td>stdev</td>
<td>8,26</td>
<td>6,62</td>
<td>7,97</td>
<td>5,42</td>
<td>2,72</td>
<td>2,71</td>
<td>11,89</td>
<td>0,48</td>
<td>0,50</td>
</tr>
<tr>
<td>min</td>
<td>76,18</td>
<td>64,08</td>
<td>41,98</td>
<td>27,93</td>
<td>3,30</td>
<td>21,05</td>
<td>126,03</td>
<td>3,47</td>
<td>3,50</td>
</tr>
<tr>
<td>max</td>
<td>110,80</td>
<td>87,17</td>
<td>75,38</td>
<td>47,80</td>
<td>15,60</td>
<td>30,82</td>
<td>173,25</td>
<td>5,65</td>
<td>5,65</td>
</tr>
</tbody>
</table>
Activities in PN Lonjsko polje

4 trees are chosen as representativ (plus) trees according to their morphologicl characteristics.
Activities in PN Lonjsko polje
THANK YOU FOR YOUR ATTENTION

Have a nice days working with black poplar
Activities in PN Lonjsko polje