EFFECTIVENESS OF SELECTION CUTTING IN RUSSIAN FEDERATION
THIS PRESENTATION WILL BE FOLLOWED UP NEXT TOPICS

• DISTRIBUTION OF PREDOMINANT BREEDS
• THE SELECTION OF TREES FOR FELLING
• RISKS DURING SELECTIVE CUTTING IN SPRUCE FORESTS
• DOMINATING ON A FINAL LOGGING
• THE INTENSITY OF FELLING AND VOLUME
DISTRIBUTION OF PREDOMINANT BREEDS

- RUSSIAN FORESTS ARE MOSTLY BOREAL (88%)
- HARD-WOODED BROADLEAVED - 2.4%,
- SOFT-WOODED BROADLEAVED - 19.4%.
- GROWING STANDING LARCH OCCUPY- 35.8%,
- PINE - 15.6%,
- SPRUCE - 10.1%,
- BIRCH-15.0%.
THE SELECTION OF TREES FOR FELLING

• ECONOMIC AND SILVICULTURAL PREREQUISITES
• METHODS AND TECHNOLOGY OF SELECTIVE CUTTING
• UNDER PRESSING DEMAND FOR A PARTICULAR KIND OF TIMBER
• IN OTHER CASES, THE STANDING SNAG, SICK AND OLD GROWTH FORESTS ARE ASSIGNED TO BE LOG
SELECTION-FELLING CUTS, IN ORDER TO DETERMINE THE OPTIMAL NUMBER OF CUTTING TECHNIQUES, TO OBTAIN THE MAXIMUM RECRUITMENT OF THE MAJOR DOMESTIC BREED IN THE SELECTED AREAS.

THIS CUTTING WHEREIN DEFECTIVE TREES ARE CUT IN THE FIRST PLACE THAT IS TREES WITH DEFECTS OF WOOD, OLD GROWTH AND MATURE
RISKS DURING SELECTIVE CUTTING IN SPRUCE FORESTS

• BLOWDOWN

• REDUCING THE TECHNICAL QUALITIES OF THE WOOD OF REMAINING TREES

• THE RISK OF FUNGAL INFECTIONS
DOMINATING ON A FINAL LOGGING

- Younger age groups of forests helps to preserve forest environment
- Thinner spruce trees does not exceed 15% of the growing stock
- The number of trees the thinner spruce - 40%
- While final cutting in spruce grow with the exploitable diameter is 8(cm)
- The costs for cutting the whole growing stand reach 30%
THE INTENSITY OF FELLING AND VOLUME

• THE AVERAGE INTENSITY OF THE SELECTION OF THE VOLUME IS 55%, INCLUDING SPECIES: SPRUCE - 51%, FIR - 58%, BIRCH – 83%

• TREES THE INTENSITY OF FELLING IS -34%

• ALL-AGED GROWING STOCK AFTER LOGGING WITH THE FOREST DENSITY OF 0.55, VOLUME 137 M3 / HA

• AGE 120 YEARS

• CAPACITY FOR ESTABLISHMENT OF UNDERBRUSH IS 75%.

<table>
<thead>
<tr>
<th>Species</th>
<th>Wood commodity</th>
<th>Splitwood</th>
<th>Total: merchantable material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>large</td>
<td>middle</td>
<td>small</td>
</tr>
<tr>
<td>Spruce</td>
<td>30</td>
<td>39</td>
<td>15</td>
</tr>
<tr>
<td>Fir</td>
<td>8</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Birch</td>
<td>3</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>68</td>
<td>24</td>
</tr>
</tbody>
</table>
THE FINAL OUTCOMES OF THE EXPERIMENT

- Commercial efficiency of the two receptions of the selective cutting was higher than in final cutting (clear felling system).

- Successful practical examples of several methods of selective cutting on the spruce stands in the taiga zone are the exceptions rather than the rule.

- The next session of the selective cutting is planned through 20-30 years.
REFERENCES

• NABATOV, N.M.
FOREST SINCE [TEXT]: TEXTBOOK FOR STUDENTS 0608L-"ECONOMICS AND MANAGEMENT AT THE ENTERPRISES OF FORESTRY AND FOREST INDUSTRIES" RUSSIAN FEDERATION. MOSCOW STATE FOREST UNIVERSITY. PUBLISHING MGUL 1997. 188 PAGES.

• NABATOV, N.M.
FOREST REGENERATION TECHNOLOGY [TEXT]: TEXTBOOK FOR STUDENTS ENROLLED IN THE SPECIAL. 260100. RUSSIAN FEDERATION. MOSCOW STATE FOREST UNIVERSITY. PUBLISHING MGUL 2002. 96 PAGES.

• FBU VNIIILM

• ZASUHIN, D.P. PAUTOV, J.A. VESPSTKA-ROMANOV, K.N.
FINAL AND SELECTIVE CUTTING IN UNEVEN-AGED SPRUCE FORESTS. [TEXT]: IN THE PERFORMANCE OF WORK UNDER A GOVERNMENT CONTRACT NO4 WITH PRILUZSKY FORESTRY. FOREST COMMITTEE OF THE KOMI REPUBLIC FROM 7.OCTOBER. 2013. 29 PAGES.