Context to be seen

• Terrain + stand (silvicultural concept + assortments)
• -> harvesting system
• -> (system of) extraction racks
• -> when (time of operation) and how (type of machines and equipment) to use them
Role of silvicultural concept

• Avoid unnecessary/uneconomic interventions (time of intervention, trees to be cut, amount to be cut)!
• Define clear objectives for every intervention!
• Differentiate acc. to stand and site!
• Practice “adaptive management”!
Adaptive management

- Define clear objectives for each operation!
- Select the optimal measure to realise the objective!
- Execute this measure!
- Check the result and compare it with the objective!
- Determine corrections if necessary!
Management Guideline for Mixed Stands of Sycamore, Ash and Beech

- **THT = 6-9m**
  - Removal of ‘wolf’ and damaged trees
  - No tree number reduction

- **THT = 9-12m**
  - Selection of 200 frame tree candidates/ha
  - Removal of frame tree competitors (dominant trees)

- **THT = 12-16m**
  - Selection of 80-120 final frame trees
  - 1st and 2nd thinning as heavy selective crown thinning

- **THT > 16m**
  - Constant control of the performance of the frame trees
  - Improvement of frame tree crowns
  - Removal of competing beech trees

- **THT > 30m**
  - Target diameter harvesting
  - Steering of natural regeneration through group shelterwood cuts

---

Prof. Dr. H. H. Höfle, CCF and Extraction Racks, 12./13.05.2010

~ Jänich, 2003
Regeneration

• What role does it play at a certain point in time? Don’t let the regeneration push you!
• Regeneration cannot be everywhere. There should be some sort of spatial arrangement (“räumliche Ordnung”) within a stand.
• Harvesting cannot take place without causing some damage to the regeneration. But it can be concentrated and it is mostly less serious than envisioned before.
Prof. Dr. H. H. Höfle, CCF and Extraction Racks, 12./13.05.2010
Prof. Dr. H. H. Höfle, CCF and Extraction Racks, 12./13.05.2010