



Forstamt Johanniskreuz

Applied period Sommer 2018
MSc. European Forestry - Leon Dijks

Content

- ▶ Forstamt Johanniskreuz
- ▶ Experience so far
- ▶ Project at the Forest Estate Sattelmühle



Forstamt Johanniskreuz



(Patricia.fidi 2006)

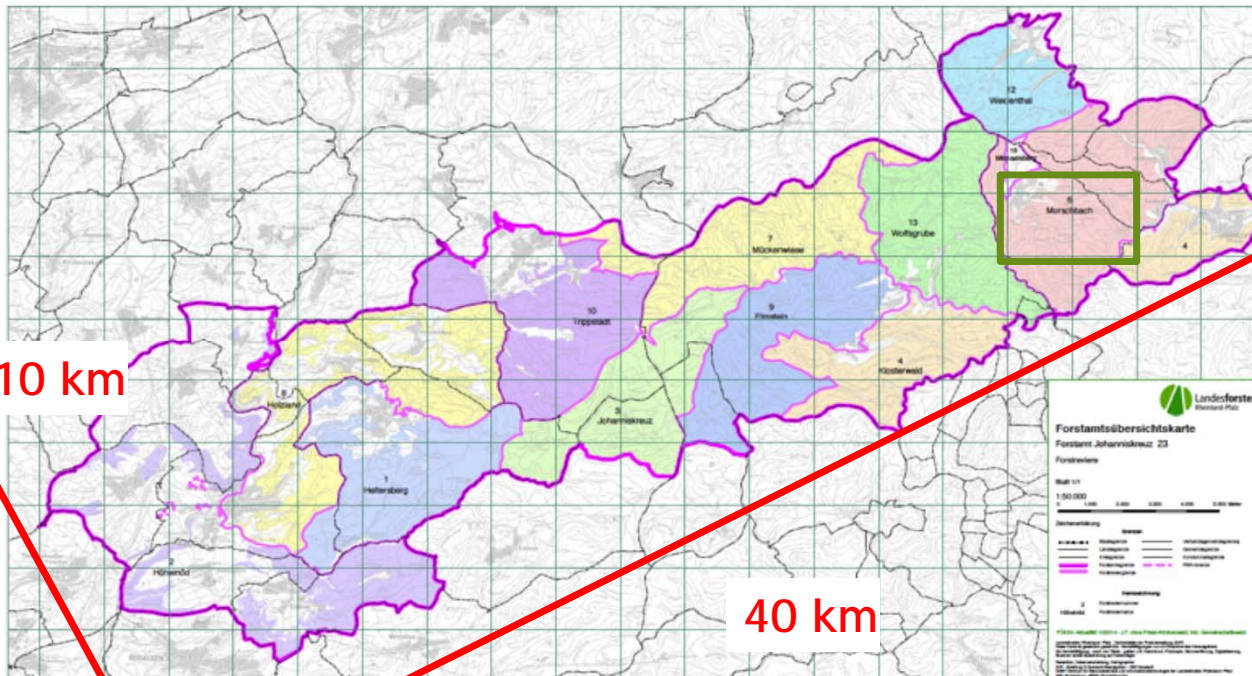


(Lencer 2008)

Forstamt Johanniskreuz

Forstamt area:
22.512 ha

Of which 72% is
state forest



Main tree species

Scots Pine	30%
Beech	29%
Oak	16%
Norway spruce	12%
Douglas fir	7%

(Landesforsten Rheinland-Pfalz 2016)

Activities



Oak Management

- ▶ Famous Oak region and management
 - ▶ Traditionally, international famous
- ▶ 1% Volume = 10% income
- ▶ Goal set
 - ▶ about 11 ha per year regeneration
- ▶ Natural regeneration
 - ▶ Beech understory

Samstag, 28. Juli 2018

Drucken

LANDKREIS KUSEL

Waldwissen für China

Trippstadt: Forstwissenschaftlerinnen aus dem Reich der Mitte erhalten Einblick in Pfälzerwald-Pflege

von Doris Theato



Burkhard Steckel zeigt den Forstwissenschaftlerinnen in einem Areal mit jungen Eichen, wie mit diesen hierzulande umgegangen wird. (Foto: Forst/frei)

Spruce emergency

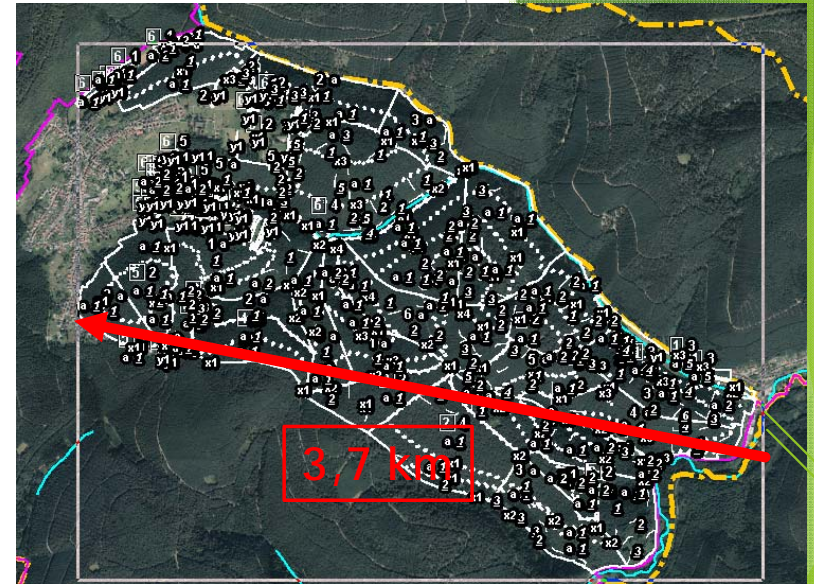
- ▶ Over 1000m³ bark “beetlewood” per “Revier”, and growing
- ▶ Capacity of transport and storage is bottleneck
- ▶ Now:
 - ▶ No regular harvest of spruce, at least until end of September
 - ▶ Work possibilities:
 - ▶ Local transport to safe zone, water storage, debarking
 - ▶ When possible, bark and branches on logging trail
 - ▶ Not allowed, Usage of insecticide



Project



Sattelmühle



<http://www.sattelmuehle.de/>

Project, New “Forsteinrichtung”

- ▶ Forsteinrichtung
 - ▶ Every forest over 50 ha is obliged to have it
 - ▶ Middle term planning
 - ▶ Primary an economical “tool”
 - ▶ Goal: “guardian of sustainability”
 - ▶ Inventory, Control, Planning
- ▶ Earlier as planned new Forsteinrichtung for the Uni Freiburg



Re-Reorganise the mapping

Old, "Stand"

- Small
- Homogeneous features
- Plan, control and booking unit

Current, "Subdivision"

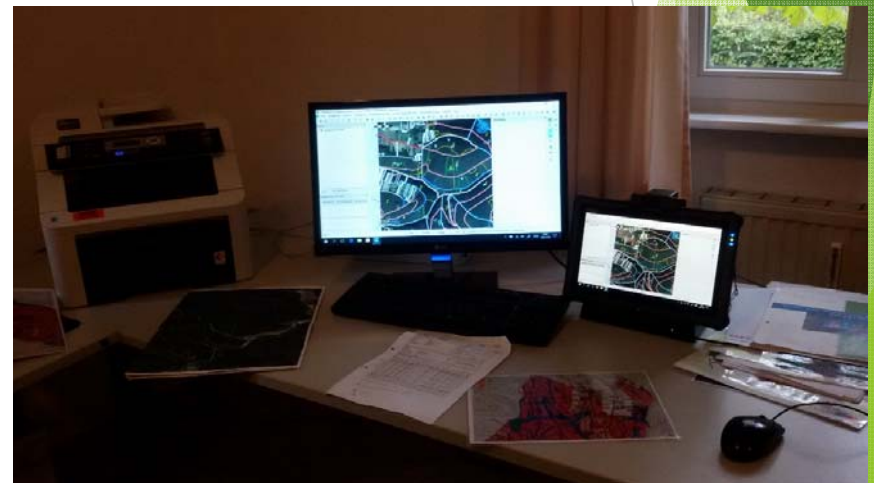
- Big
- Heterogeneous features
- Plan, control and booking unit

New, "Befundeinheit"

- In between size
- Share an ecological phase
- Plan, control and booking unit

Average day at the job

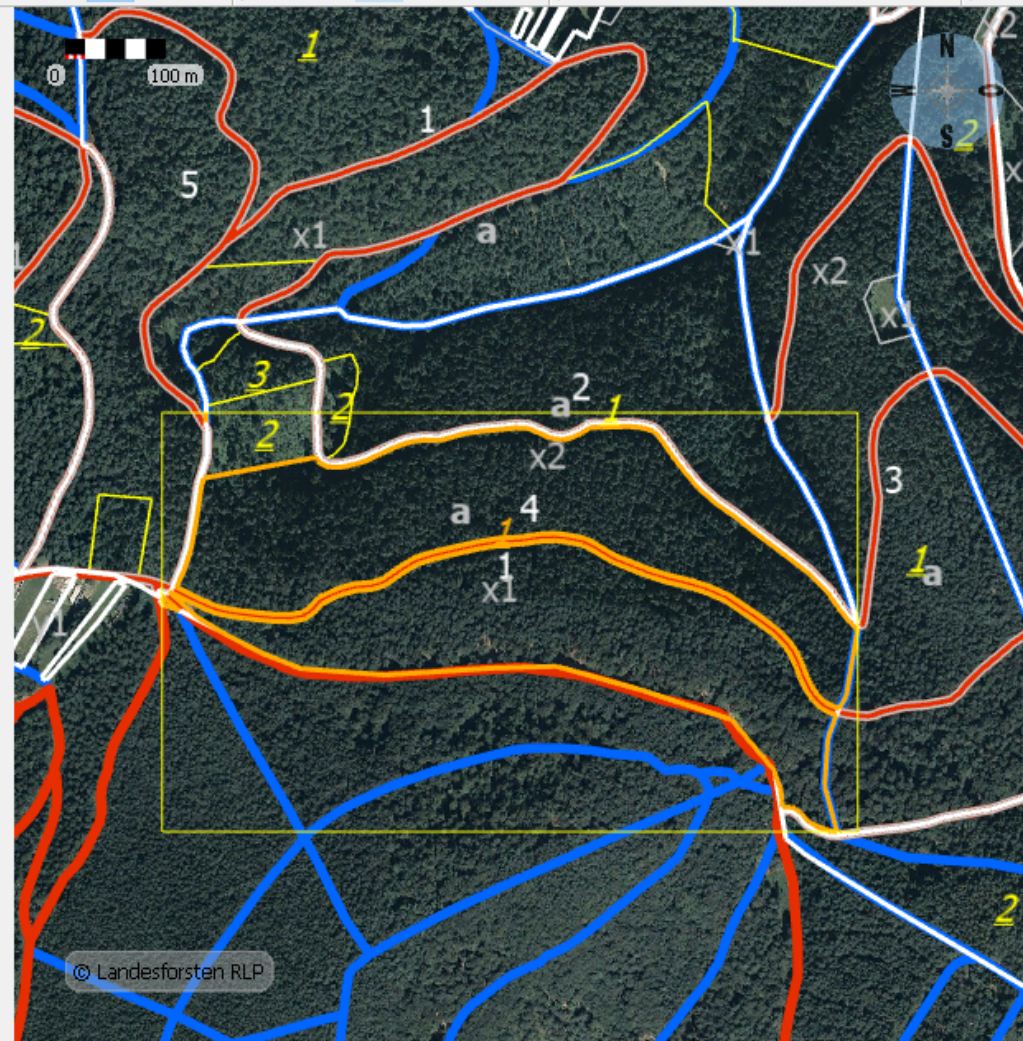
- ▶ 1) Data check: What area fits together, where to look for sure and how to walk efficiently (Note it down!)
- ▶ 2) During the walk, decide the borders, pay attention for changes and understories. (Note it down!)
- ▶ 3) Create the new areas in the program, with the right data.





Explorer

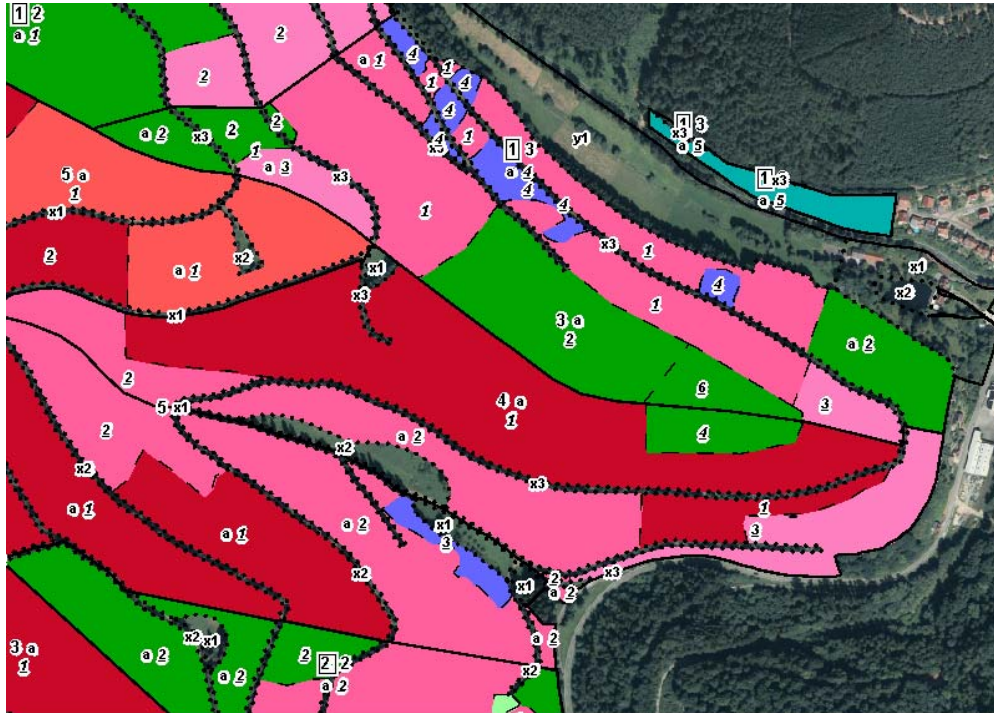
- Betriebe
 - 501: FG Sattelmühle
 - SP-Variante beschlossen
 - Prozesssteuerobjekte
 - Waldrefugien
 - Distrikte
 - 1 165,60
 - 2 89,60
 - 3 41,97
 - 4 23,10
 - Abteilungen
 - 1 15,69
 - Waldorte
 - a 14,77 ✓
 - Vollzüge
 - Waldfunktionen
 - Umweltvorsorgemaßnahmen
 - Befundeinheiten
 - 1 13,3
 - Schichten
 - 0: Hauptschicht (13.3 ha - %)
 - Baumartenzeilen
 - 3-1 KJ 107-8,2
 - 3-2 Bu 107-2,5
 - 3-3 Fi 107-2,5
 - 3-4 WKJ 107-0,1
 - 2: Zwischenschicht (13.3 ha 100 %)
 - 3: Unterschicht (1.5 ha - %)
 - Weitere Baumarten
 - 2 0,9
 - 3 0,5



Eigenschaften

Forsteinrichtung

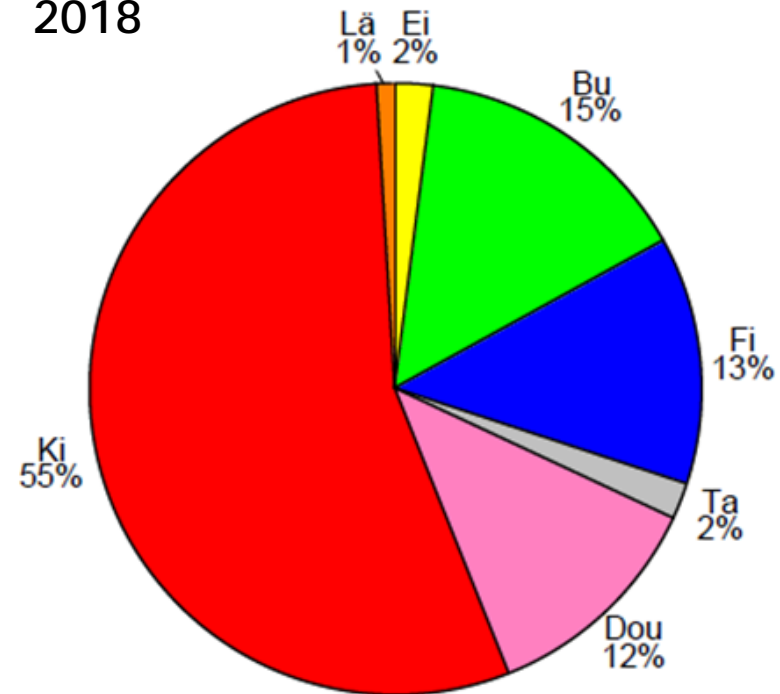
| Eigenschaft | Wert |
|-------------------------------|---------------------------------------|
| Baumartenzeile | |
| Typ | 3: geprüft |
| Nummer | 1 |
| Baumart | 80: Kiefer |
| Fläche in % | - % |
| Fläche in ha | 8,2 ha |
| Alter | 107 j |
| Alter von | 76 j |
| Alter bis | 115 j |
| Phase | 4: Reife |
| Holzprodu... | 3: Massenware normale Qualität |
| Intensität | 4: voll bewirtschaftet |
| Entstehung | 0: unbekannt |
| Mischung... | 1: kleinräumig |
| Lage | 0: keine |
| Ertragskundliche Daten | |
| Ertragsklas... | 1,5 |
| Bestockun... | 1,00 |
| Aufnahme... | Ertragstafelbasierte Vorratsschätzung |
| Vorrat/ha | 352,2 Efm/ha |
| Vorrat abs... | 2888,0 Efm |
| Zuwachse... | 5: Ertragstafel |
| lfd. Zuwac... | 4,9 Efm/j/ha |
| lfd. Zuwac... | 40,3 Efm/j |
| Planung | |
| Befahrbar | <input checked="" type="checkbox"/> |
| BHD (auss... | 3: stark |
| Seriell bep... | <input type="checkbox"/> |



Positive findings for the Estate

- ▶ Relative high level of financial interesting trees
- ▶ Almost all the pine and douglas-fir stands pruned
- ▶ Relative high yield

Share of tree in canopy layer in 2018

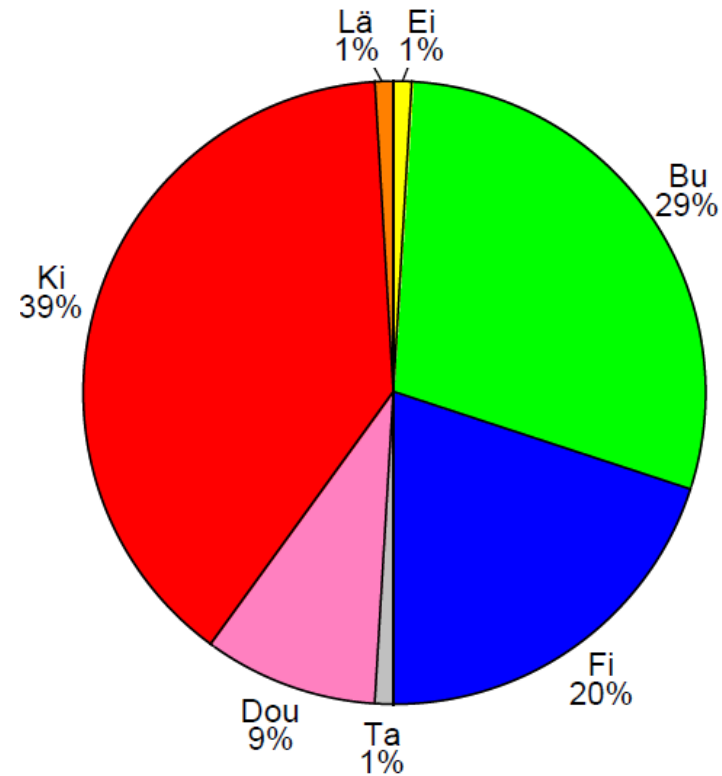


Negative findings (I)

- ▶ Financially less interesting understory
- ▶ Damaging understory for canopy layer



Share in all forest stories combined



Negative findings (II)

- ▶ Large growing stock and high average age
- ▶ Why:
 - ▶ Financially not optimal
 - ▶ Also damage own capital and hinders regeneration

| | per Ha |
|---------------------------------|--------|
| Total Yield [m3/year] | 6,3 |
| Total stock [m3] | 284,7 |
| Total planned harvest [m3/year] | 5 |

| Species | Beech | Spruce | Pine | All |
|-------------|-------|--------|------|-----|
| average age | 133 | 87 | 108 | 102 |

Recommendations

- ▶ Luxury, harvest more... Especially in beech
 - ▶ Gehrhardt formula shows 8,0 m³
- ▶ Pay attention at new generation. Keep a fair share of conifers



Thank you for your attention

