**FIRE PARADOX – GFMC Prescribed Burning Demonstration Network Inventory Sheet**

| **Prescribed Burning Demonstration Sites<br>- Site Description and Objectives -** | | **Local Site Name: Bernau-Innerlehen** |
|---|---|---|
| Country:<br>Germany, Baden-Württemberg | Region:<br>Southern High Black Forest | Location:<br>Bernau-Innerlehen<br>Hohenzinkenweide |
| Unit No./Admin. Unit: 5 | Owner:<br>Municipality of Bernau | Site area (ha):ca. 1.7<br>(including pasture plot) |

| | | |
|---|---|---|
| UTM zone: ?<br>Map 1:25 000 | UTM (x): ?<br>R 3425 850<br>UTM (y):<br>H 5295 300 | Map / Aerial photo :<br>o Yes, attached<br>o No |
| First established:<br>1975 | Area(s) burnt (ha):<br>ca. 0.09 | Fire return interval (or time since last burn, or next burn planned):<br>1 plot prescribed burning yearly<br>1 plot prescribed burning each second year |

Number of plots (in case of an array of sub-plots for experimental repetitions, particular site differences or high number of operationally burned sites: 2

Special remarks:

**Purpose of Treatment:**
Restauration of ordinary high mountain grassland and suppression of the establishment of woody plants (trees, shrubs, dwarf shrubs)

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|---|---|
| Specific Treatment Objectives:<br>Conservation of high mountain pastures , specific in the Black Forest (*Festuco-Genistelletum* - Flügelginsterweiden), and to prevent the establishment of *Vaccinium myrtillus* | Objectives reached?<br>o Yes, with restriction<br>o No<br>Specify: see publications |

**Desired burn conditions to reach objectives (optional or if necessary as general prerequisite)**
Burning protocols since the beginning over the 30-year-period, at least in the last 20 years

| | |
|---|---|
| Wind speed (m/s):<br>-- | Wind direction:<br>-- |
| Relative humidity (%):<br>-- | Soil moisture:<br>-- |
| Air temperature (°C):<br>-- | Burn period (time of year):<br>Late autumn (November/December) or early spring (April/May) |

What problems do occur? Prescribed burning often too late in the beginning of springtime because of snow drifts blocking the approach road

**Site description** See appended table

| | | |
|---|---|---|
| Vegetation type (main species):<br>High mountain pastures (Flügelginsterweiden); but in the plot burned every 2. year spreading of *Vaccinium*-dwarf shrub-heath | Annual mean precipitation (mm/a):<br>1800 mm | Mean precipitation during time of burn (mm):<br>-- |
| Fuel load (t ha$^{-1}$):<br>O,01-0,04 t in the different years | Annual mean temperature (°C):<br>±5,5° | Mean temperature during time of burn (°C):<br>-- |

Fuel description:
Grassland litter, partly dwarf shrub litter

| | | | | |
|---|---|---|---|---|
| Topography:<br>Old pasture slope | Slope (%)<br>20-35 % | Aspect:<br>SSE | Altitude (m a.s.l.):<br>1060-1120 m | Soil conditions:<br>Deep Humus-Brown earth |

Other:

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| **Burn team specifications** | |
|---|---|
| Parties involved: Ministry of agriculture, Landesanstalt für die Entwicklung der Landwirtschaft (LEL) Schwäb. Gmünd.<br>(people making priscribed burning):<br>Research technician (Versuchstechiker) of the local agriculture administration (Landwirtschaftsämter), partly by myself | Specific expertise or training:<br>o Yes<br>o No<br>Please specify: prescribed burning course; Instruction and guidance by Schreiber |

| **Documentation of demonstration site** | | |
|---|---|---|
| Management plan:<br>o Detailed management plan<br>o Simple management plan<br>o none | Burn protocol:<br>o Yes<br>o No | Monitoring of<br>o Weather data<br>o Fuel accumulation<br>o Fire behaviour<br>o Smoke |
| Presentations:<br>See publications. Field trips every year | | |
| Photos/ videos: 40 slides over the time | | |
| Publications: u.a.<br>SCHREIBER, K.-F., 1981: Das kontrollierte Brennen von Brachland - Belastungen, Einsatzmöglichkeiten und Grenzen. Eine Zwischenbilanz über feuerökologische Untersuchungen. Angew. Botanik **55**, 255-275.<br>SCHREIBER, K.-F., 1997: 20 Jahre Erfahrung mit dem kontrollierten Brennen auf den Brachflächen in Baden-Württemberg. „Feuereinsatz im Naturschutz“, NNA-Ber. **10**, 5, A. Toepfer Akad. Naturschutz, Schneverdingen, 59-71.<br>SCHREIBER, K.-F. 2006: Langjährige Entwicklung brachgefallener Grasländer in Südwestdeutschland bei verschiedenem Management (ungestörte Sukzession, Mulchen 2 x jährlich, kontrolliertes Brennen jährlich). Bayerische Akademie der Wissenschaften, Rundgespräche der Kommission für Ökologie Nr. ?, (Oktober 2005 München). In press | | |

# Versuchsanlage Bernau