

Ecological monitoring of prescribed burning in the LIFE-Project Rohrhardsberg
(Black Forest, Baden-Wuerttemberg, Germany)

Symposium on Fire Management in Cultural and Natural Landscapes, Nature Conservation and Forestry in Temperate-Boreal Eurasia
Freiburg, Germany, 25-27 January 2008



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Jörg Rietze, Working Group for Animal Ecology and Planning, Filderstadt, Germany



undergrazed Nardus grassland



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Projekt framework

- Time of investigation: 2007 – 2011
- Funding: Regierungspräsidium Freiburg (Ref. 56, Naturschutz und Landschaftspflege)
- Subjects of study:
 - ground beetles
 - grasshoppers
 - butterflies (target species)
 - soil parameters
 - vegetation/flora

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Main questions of the study


- Can the fire-management with prescribed burning help to **conserve undergrazed pasture** ("Nardus grassland" code: *6230 FFH-directive, Annex I) **in combination with** other management types?
- Are there **relevant positive effects** of burning on the prior target species for nature conservation of the region?
- Are there **relevant negative effects** of burning on the prior target species of nature conservation in this region?
- Is it possible to prevent the **succession of dominating stands** (*Pteridium aquilinum*, *Cytisus scoparius*) by prescribed burning in combination with other management types?

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Study areas in the Rohrhardsberg-Region, Black Forest



	reference: Nardus grassland (R)	fire planned (F)	comparison patch, unburned (O)	succession (S)	additional patches (Z)
Prechtaler Schanze-North	1	3	2	4	5 Succession <i>Cytisus scoparius</i> (Sz) O eroded path (R)
Prechtaler Schanze-South	6	7	8	9	
Kostgefall-North	10	11	12	13	
Kostgefall-South	14	16	15	17	


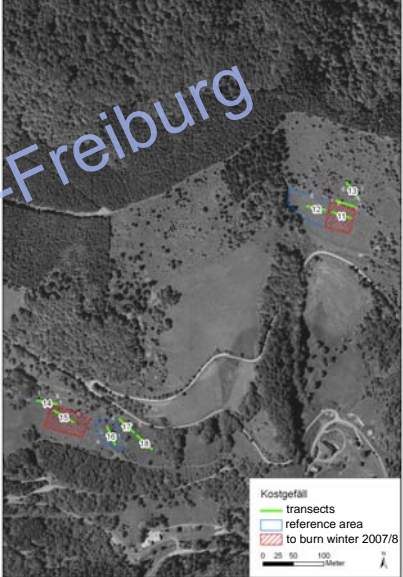


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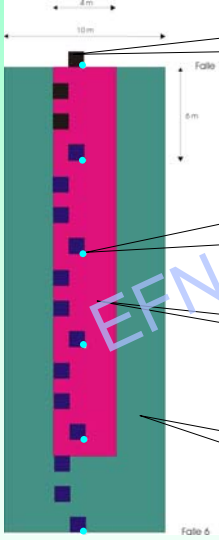
Study design in the Rohrhardsberg-Region, Black Forest

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Study design in the Rohrhardsberg-Region, Black Forest



Duration-Square-Method : vegetation

pitfall trap: ground beetles, (spiders), soil parameters at trap-no. 1, 3 and 6

4 m x 25 m transect: grasshoppers, flora

10 m x 30 m transect: butterflies (target species)

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Nardus grassland Prechtaler Schanze North
additional reference



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Nardus grassland Prechtaler Schanze North
additional reference



Stenobotrus stigmaticus

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fire/comparism patches Prechtaler Schanze North



Pteridium aquilinum


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Succession Prechtaler Schanze Nord



additional succession
Cytisus scoparius

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Nardus grassland Prechtaler Schanze South



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fire/comparism patches Prechtaler Schanze South



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Succession Prechtaler Schanze South



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Nardus grassland and target species Kostgefäll North



Decticus verrucivorus

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fire/comparism patches Kostgefäll North



Staudoderus scalaris

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Succession Kostgefäll North



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Nardus grassland and target species Kostgefäll South

Dactylorhiza sambucina

Hesperia comma

Egg

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fire/comparism patches Kostgefäll South

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