

FIRE PARADOX – GFMC Prescribed Burning Demonstration Network Inventory Sheet

Prescribed Burning Demonstration Sites - Site Description and Objectives -		Local Site Name: Koli
Country: Finland	Region: North Karelia	Location: Koli National Park
Unit No./Admin. Unit:	Owner/Manager: Finnish Forest Research Institute	Site area (ha): 2909
UTM zone: EUREF FIN TM35FIN	UTM (x): 644270 UTM (y): 6996450	Map / Aerial photo : <input checked="" type="checkbox"/> Yes (Please attach) <input type="checkbox"/> No
First established: 6-8/2005 (1 st measurements of permanent sample plots)	Area(s) burnt (ha): 0.5 ha + 0.4 ha = 0.9 ha	Fire return interval (or time since last burn, or next burn planned): 10 July 2006 (only one burning)
Number of plots (in case of an array of sub-plots for experimental repetitions, particular site differences or high number of operationally burned sites): 5 plots - 2 plots on the first burning site (0.5 ha) and 1 plot on its control site - 1 plot on the second burning site (0.4 ha) and 1 plot on its control site		
Special remarks:		
Purpose of Treatment: Determination of restoration effects of fire on the development of a mature spruce stand		
Specific Treatment Objectives: 1) Monitoring of forest succession (including trees, lesser vegetation and macro-fungi) after a fire 2) Forest health monitoring		Objectives reached? <input type="checkbox"/> <input type="checkbox"/> Specify: Monitoring the ecological effects of the restoration burning started in 2005 and results will be achieved in the future
Desired burn conditions to reach objectives (optional or if necessary as general prerequisite)		
Wind speed (m/s): < 5	Wind direction: S – SE	
Relative humidity (%): < 50	Soil moisture: Low-very low (5-7 dry days)	
Air temperature (°C): 25	Burn period (time of year): June-July	
What problems do occur?		
Site description		



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Vegetation type (main species): Myrtillus Type (MT), spruce dominated		Annual mean precipitation (mm/a): 600		Mean precipitation during time of burn (mm): 135
Fuel load (target fuel) (t ha ⁻¹): Volume of standing trees: 210 m ³ ha ⁻¹ Trees pushed down from the firebreaks to the burning areas: 40 m ³ ha ⁻¹ (5-m firebreaks were prepared and trees on them were treated using an excavator.)		Annual mean temperature (°C):		Mean temperature during time of burn (°C): 15.5
Fuel description: Former managed stand, trees (<i>Picea abies</i>) thinned to normal density				
Topography: Hillside	Slope (%): 9 %	Aspect: eastern	Altitude (m a.s.l.): 150–160	Soil conditions: Forest land, sandy till Rather fertile soil with good water storage capacity
Other: –				

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Burn team specifications		
Parties involved: Research team at the Joensuu Research Unit of the Finnish Forest Research Institute		Specific expertise or training: ○ ○ Please specify:
Documentation of demonstration site		
Management plan: <input checked="" type="checkbox"/> Detailed management plan <input type="checkbox"/> Simple management plan <input type="checkbox"/> none	Burn protocol: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Monitoring of <input checked="" type="checkbox"/> Weather data <input checked="" type="checkbox"/> Fuel accumulation <input checked="" type="checkbox"/> Fire behaviour <input type="checkbox"/> Smoke
Presentations:		
Photos/ videos:		
Publications: Lovén, L. and P. Äänismaa. 2004. Planning of the Sustainable Slash-and-Burn Cultivation Programme in Koli National Park, Finland. Int. Forest Fire News No. 30, 16-21. https://gfmc.online/wp-content/uploads/03-IFFN-30-Finland-2.pdf		

