Supplementary file

Annex Table. General description of variables included in the analysis. Additional descriptions of the variables considered are provided at (Skoglandskap 2007)

Variable	Unit	Description
Age	year	Stand age before damage
Development class	Categorical	Stand value before damage measurement divided in five categories: 1-forest under renewal*, 2-young trees, 3-younger production forest, 4-older production forest and 5-mature forest
Density	trees ha^{-1}	Trees from all the species
Diameter	cm	Plot mean diameter pondered by basal area before damage measurement
Height	m	Average stand height before damage measurement
Basal area	m^2 ha^{-1}	Plot basal area before damage measurement
Stand size	Categorical	Stand size before damage measurement divided in seven categories: <0.2 ha, 0.2-0.5 ha, 0.5-1 ha, >1 ha, 1-2 ha, 2-5 ha, >5 ha
Stand dominant specie	Categorical	Dominant tree species before the damage: spruce, pine, birch, mixed
Percentage of spruce	%	Percentage of spruce in the stand before the damage measurement
Percentage of pine	%	Percentage of pine in the stand before the damage measurement
Percentage of birch	%	Percentage of birch in the stand before the damage measurement
Percentage of conifer	%	Percentage of conifers in the stand before the damage measurement
Percentage of deciduous	%	Percentage of deciduous in the stand before the damage measurement
Shannon index		Diversity of the stand indicator before the damage measurement, calculated for the basal area of the four forest types: spruce, pine, birch and mixed. $$Shannon\ index = \sum_{i=1}^{s} p_i\ ln\ p_i\ [0,\ ln\ S]$$ where p_i is the basal area probability: g_i/G, being g_i the basal area of the i specie and G the total basal area of the plot. i, is the number of species ranging from $1…S$
Gini coefficient		Structure index of the stand before damage measurement, calculated for the basal area of the trees in the stand. $$Gini\ coefficient = \frac{\sum_{i=1}^{N}\sum_{j=1}^{N}|g_i-g_j|}{2n^2\bar{g}}\ [0,1]$$ where N is the number of trees in the plot, i, j two different trees in the plot, g_i the basal area of the tree i, g_j the basal area of the tree j and $\bar{g}$ the mean basal area of the plot
Structure	Categorical	Forest structure before damage measurement divided in single, two or multi-story
Population on the stand edge	Categorical	Population on the edge before damage measurement water (river, stream, swamp), agricultural land, a higher population (e.g. forest with higher development class), lower population (e.g. forest with lower development class), buffer zone to water or agricultural land (narrow forest area), edge (not classified) or no edge (20 m from plot center)

Stand edge distance	m	Distance of the stand edge before damage measurement
Crown cover	%	Stand crown cover before the damage
Altitude	m	Meters above sea level
Site index	Categorical	Site index before damage: spruce 6, 8, 11, 14, 17, 20, 23, 26; pine 6, 8, 11, 14, 17, 20; birch 6, 8, 11, 14, 17, 20, 23;
Previous treatment	Categorical	Treatment before damage: No treatment, final felling, thinning, cutting of seed tree, tending, cleaning, cutting (various treatments), ditching, selective cutting, regeneration planting, scarification, pruning
Slope	%	Measured in percentage
Slope length	m	
Slope orientation	Categorical	Main slope direction on an area of 0,1 ha around the sample plot divided in four categories: N,S,W,E
Slope distance	m	Mean soil depth, divided in <25cm, 25-50cm, 50-100cm, >100cm
Soil type	Categorical	Divided in two categories: mineral or peat soil
Steepness	%	
Relief	Categorical	Estimated topographic position of the landscape element surrounding the sample plot. Divided in 9 categories: plain (steepness ≤10%), convex valley or slope, concave valley or slope, straight valley or slope, valley bottom, hollow, depression, terrace, ridge, top of hill

* during NFI 7 and 8, damage was not measured on this category