Appendix 1. Results of the generalized additive model (GAM) for the basal area (m^2) of individual trees. Significance levels as obtained from ANOVA are given as *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$ and n.s. $p > 0.05$. Mean and standard deviations (SD) were included for numeric variables.

	p	***Mean (±SD)***
Biotope type		
Thermophilic, oak-dominated stands		
Thermophilic, oak-hornbeam stands	n.s.	
Mesophilic, oak-hornbeam stands	**	
Slightly acidic, oak-hornbeam stands	n.s.	
Forest fragment size		87.02(±103.86)
<22 hectares		
22-55 hectares	n.s.	
>55 hectares	n.s.	
Edge conditions		
Edge orientation	***	183(±113)
Distance from the edge	**	74.64(±93.12)
Slope conditions		
Slope aspect	*	166(±93)
Slope inclination	**	11.62(±5.66)
Soil conditions		
C/N ratio	***	11.97(±2.67)
N/P ratio	n.s.	386.67(±307.9)

Appendix 4. Results of the generalized additive models (GAM) for the basal area (m^2) of individual trees, analyzed in different sub-models for each plot. Significance levels as obtained from ANOVA are given as *p < 0.05; **p < 0.01; ***p < 0.001 and n.s. p > 0.05. Mean and standard deviations (SD) were included for numeric variables at each biotope.

	Thermophilic, oak-dominated stands		Thermophilic, oak-hornbeam stands		Mesophilic, oak-hornbeam stands		Slightly acidic, oak-hornbeam stands	
	p	***mean (±SD)***	***p***	***mean (±SD)***	***p***	***mean (±SD)***	***p***	***mean (±SD)***
Forest fragment size (Ha)		75.56(±97.89)		73.47(±89.02)		91.78(±108.45)		109.36(±117.06)
<22 hectares								
22-55 hectares	**		n.s.		n.s.		n.s.	
>55 hectares	***		**		n.s.		***	
Edge conditions								
Edge orientation	n.s.	200(±90)	n.s.	207(±106)	***	157(±116)	***	197(±118)
Distance from the edge	***	118.43(±115.91)	n.s.	87.75(±108.93)	***	65,73(±81,33)	***	42,25(±42,26)
Slope conditions								
Slope aspect	*	209±47)	n.s.	175(±75)	***	139(±106)	*	194(±89)
Slope inclination	***	14,09±7,27)	**	10,49(±4,81)	***	11,87(±5,61)	***	11,34(±5,43)
Soil conditions								
C/N ratio	n.s.	11,62(±1,8)	n.s.	11,32(±2.04)	n.s.	12,62(±3,13)	***	11,63(±2,41)
N/P ratio	n.s.	571.56(±337.97)	***	489.48(±355.24)	*	288.3(±248)	***	331.81(±195.49)

Appendix 3. Results of the generalized additive model (GAM) for the basal area (m^2) of individual trees, analyzed in different submodels for the most common trees: oaks (*Quercus robur* and *Quercus petrea*), hornbeam (*Caripuns betulus*) and field maple (*Acer campestre*). Significance levels as obtained from ANOVA are given as $*p < 0.05$; $**p < 0.01$; $***p < 0.001$ and n.s. $p > 0.05$. Mean and standard deviations (SD) were included for numeric variables for each tree species.

	Oaks		Hornbeam		Field maple	
	p	***mean (±SD)***	***p***	***mean (±SD)***	***p***	***mean (±SD)***
Biotope type						
Thermophilic, oak-dominated						
Thermophilic, oak-hornbeam	***		n.s.		*	
Mesophilic, oak-hornbeam	***		n.s.		n.s.	
Slightly acidic, oak-hornbeam	**		***		*	
Forest fragment size		92.26(±105.59)		82.82(±101.97)		70.08(±94.93)
<22 hectares						
22-55 hectares	*		n.s.		n.s.	
>55 hectares	n.s.		n.s.		n.s.	
Edge conditions						
Edge orientation	***	199(±110)	n.s.	145(±111)	n.s.	149(±103)
Distance from the edge	***	76.07(±88.76)	n.s.	77.88(±95.33)	**	51.14(±80.47)
Slope conditions						
Slope aspect	n.s.	177(±85)	n.s.	140(±99)	***	152(±90)
Slope inclination	***	11.94(±5.72)	***	11.65(±6.03)	*	10.09(±4.81)
Soil conditions						
C/N ratio	**	11.59(±2.37)	***	12.77(±3.17)	***	11.68(±2.37)
N/P ratio	**	418.6(±302.67)	n.s.	309.73(±281.64)	n.s.	329.58(±271.32)

Appendix 4. Results of generalized additive model (GAM) for stand basal areas (m^2) of each plot. Significance levels as obtained from ANOVA are given as *p < 0.05; **p < 0.01; ***p < 0.001 and n.s. p > 0.05. Mean and standard deviations (SD) were included for numeric variables for each tree species.

	p	***mean* (±SD)**
Biotope type		
Thermophilic, oak-dominated stands		
Thermophilic, oak-hornbeam stands	n.s.	
Mesophilic, oak-hornbeam stands	n.s.	
Slightly acidic, oak-hornbeam stands	n.s.	
Forest fragment size		98.89(±109.53)
<22 hectares		
22-55 hectares	n.s.	
>55 hectares	n.s.	
Edge conditions		76.51(±94)
Edge orientation	n.s.	197(±114)
Distance from the edge	n.s.	
Slope conditions		
Slope aspect	n.s.	174(±93)
Slope inclination	n.s.	11.33(±5.36)
Soil conditions		
C/N ratio	n.s.	11.64(±2.48)
N/P ratio	n.s.	385.94(±298.56)