

Appendix 1. Results of the generalized additive model (GAM) for the basal area (m<sup>2</sup>) 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.

	<i>p</i>	<i>Mean (±SD)</i>
<i>Biotope type</i>		
Thermophilic, oak-dominated stands		
Thermophilic, oak-hornbeam stands	n.s.	
Mesophilic, oak-hornbeam stands	**	
Slightly acidic, oak-hornbeam stands	n.s.	
<i>Forest fragment size</i>		87.02(±103.86)
<22 hectares		
22-55 hectares	n.s.	
>55 hectares	n.s.	
<i>Edge conditions</i>		
Edge orientation	***	183(±113)
Distance from the edge	**	74.64(±93.12)
<i>Slope conditions</i>		
Slope aspect	*	166(±93)
Slope inclination	**	11.62(±5.66)
<i>Soil conditions</i>		
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<sup>2</sup>) 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	
	<i>p</i>	<i>mean</i> ( $\pm$ SD)	<i>p</i>	<i>mean</i> ( $\pm$ SD)	<i>p</i>	<i>mean</i> ( $\pm$ SD)	<i>p</i>	<i>mean</i> ( $\pm$ SD)
<i>Forest fragment size (Ha)</i>		75.56( $\pm$ 97.89)		73.47( $\pm$ 89.02)		91.78( $\pm$ 108.45)		109.36( $\pm$ 117.06)
<22 hectares								
22-55 hectares	**		n.s.		n.s.		n.s.	
>55 hectares	***		**		n.s.		***	
<i>Edge conditions</i>								
Edge orientation	n.s.	200( $\pm$ 90)	n.s.	207( $\pm$ 106)	***	157( $\pm$ 116)	***	197( $\pm$ 118)
Distance from the edge	***	118.43( $\pm$ 115.91)	n.s.	87.75( $\pm$ 108.93)	***	65,73( $\pm$ 81,33)	***	42,25( $\pm$ 42,26)
<i>Slope conditions</i>								
Slope aspect	*	209 $\pm$ 47)	n.s.	175( $\pm$ 75)	***	139( $\pm$ 106)	*	194( $\pm$ 89)
Slope inclination	***	14,09 $\pm$ 7,27)	**	10,49( $\pm$ 4,81)	***	11,87( $\pm$ 5,61)	***	11,34( $\pm$ 5,43)
<i>Soil conditions</i>								
C/N ratio	n.s.	11,62( $\pm$ 1,8)	n.s.	11,32( $\pm$ 2.04)	n.s.	12,62( $\pm$ 3,13)	***	11,63( $\pm$ 2,41)
N/P ratio	n.s.	571.56( $\pm$ 337.97)	***	489.48( $\pm$ 355.24)	*	288.3( $\pm$ 248)	***	331.81( $\pm$ 195.49)

Appendix 3. Results of the generalized additive model (GAM) for the basal area (m<sup>2</sup>) of individual trees, analyzed in different submodels for the most common trees: oaks (*Quercus robur* and *Quercus petraea*), 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
	<i>p</i>	mean (±SD)	<i>p</i>	mean (±SD)	<i>p</i>	mean (±SD)
<i>Biotope type</i>						
Thermophilic, oak-dominated						
Thermophilic, oak-hornbeam	***		n.s.		*	
Mesophilic, oak-hornbeam	***		n.s.		n.s.	
Slightly acidic, oak-hornbeam	**		***		*	
<i>Forest fragment size</i>						
<22 hectares		92.26(±105.59)		82.82(±101.97)		70.08(±94.93)
22-55 hectares	*		n.s.		n.s.	
>55 hectares	n.s.		n.s.		n.s.	
<i>Edge conditions</i>						
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)
<i>Slope conditions</i>						
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)
<i>Soil conditions</i>						
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<sup>2</sup>) 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.

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