

Supplemental Files for Wright, Juska, and Gorchov 2019. White-tailed deer browse preference for an invasive shrub, Amur honeysuckle (*Lonicera maackii*), depends on woody species composition. Invasive Plant Science and Management 12: 11–21. doi: 10.1017/inp.2018.30

Table A.1. Total number of twigs in the 0.3- 1.7 m height range in quadrats, number of these twigs with evidence of early- to mid-growing season browse by deer, proportion of twigs browsed for each woody species, and proportion of browsed twigs comprised of each woody species (r_i in Equation 2) at each site. All species, excluding *L. maackii*, were classified as more-preferred species (MPS) or less-preferred species (LPS) (Tables A.2, A.3).

Site: Davidson Woods		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse
	<i>L. maackii</i>	4112	222	0.05	0.71
MPS	<i>A. saccharum</i>	112	19	0.17	0.06
	<i>F. quadrangulata</i>	171	18	0.11	0.06
	<i>F. americana</i>	74	10	0.14	0.03
	<i>R. multiflora</i>	13	6	0.46	0.02
	<i>Q. muehlenbergii</i>	13	1	0.08	0.00
	<i>U. americana</i>	12	7	0.58	0.02
LPS	<i>C. cordiformis</i>	4	1	0.25	0.00
	<i>P. serotina</i>	253	28	0.11	0.09
	<i>Q. bicolor</i>	1	0	0.00	0.00
	<i>T. radicans</i>	3	0	0.00	0.00
Totals		4768	312		
Site: Hueston Woods		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse
	<i>L. maackii</i>	470	85	0.18	0.42
MPS	<i>A. saccharum</i>	43	14	0.33	0.07
	<i>C. occidentalis</i>	6	3	0.50	0.01
	<i>F. americana</i>	64	17	0.27	0.08
	<i>F. quadrangulata</i>	31	6	0.19	0.03
	<i>Smilax</i> spp.	60	41	0.68	0.20
	<i>U. americana</i>	4	2	0.50	0.01
LPS	<i>A. triloba</i>	33	0	0.00	0.00
	<i>C. cordiformis</i>	7	0	0.00	0.00
	<i>F. grandifolia</i>	66	10	0.15	0.05
	<i>L. benzoin</i>	74	0	0.00	0.00
	<i>P. serotina</i>	172	26	0.15	0.13
Totals		1030	204		

Site: Miami Whitewater East		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse
MPS	<i>L. maackii</i>	675	183	0.27	0.61
	<i>A. saccharum</i>	44	13	0.30	0.04
	<i>C. occidentalis</i>	7	3	0.43	0.01
	<i>F. americana</i>	31	7	0.23	0.02
	<i>L. japonica</i>	2	0	0.00	0.00
	<i>R. multiflora</i>	73	42	0.58	0.14
	<i>R. pseudoacacia</i>	23	18	0.78	0.06
	<i>Rubus</i> spp.	27	9	0.33	0.03
	<i>U. americana</i>	12	8	0.67	0.03
LPS	<i>A. triloba</i>	48	0	0.00	0.00
	<i>L. benzoin</i>	9	0	0.00	0.00
	<i>P. serotina</i>	146	17	0.12	0.06
Totals		1097	300		
Site: Miami Whitewater West		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse
MPS	<i>L. maackii</i>	186	123	0.66	0.45
	<i>A. saccharum</i>	199	9	0.05	0.03
	<i>C. occidentalis</i>	31	9	0.29	0.03
	<i>F. americana</i>	34	2	0.06	0.01
	<i>R. multiflora</i>	1	0	0.00	0.00
	<i>Rubus</i> spp.	6	0	0.00	0.00
	<i>U. americana</i>	27	16	0.59	0.06
	<i>U. rubra</i>	3	0	0.00	0.00
	LPS	<i>A. negundo</i>	25	5	0.20
<i>A. triloba</i>		98	0	0.00	0.00
<i>E. umbellata</i>		5	0	0.00	0.00
<i>F. grandifolia</i>		89	4	0.04	0.01
<i>L. benzoin</i>		2120	100	0.05	0.36
<i>P. quinquefolia</i>		5	2	0.40	0.01
<i>P. serotina</i>		11	6	0.55	0.02
<i>T. radicans</i>	1	0	0.00	0.00	
Totals		2841	276		
Site: Mount Airy		Total Twigs	Twigs Browsed	Prop. Browsed	Proportion of Browse
MPS	<i>L. maackii</i>	1714	120	0.07	0.38
	<i>A. saccharum</i>	28	13	0.46	0.04
	<i>C. occidentalis</i>	290	175	0.60	0.55
	<i>E. alatus</i>	4	0	0.00	0.00
	<i>F. americana</i>	17	1	0.06	0.00
	<i>Rubus</i> spp.	3	3	1.00	0.01
	<i>U. americana</i>	7	4	0.57	0.01

LPS	<i>A. triloba</i>	64	0	0.00	0.00
	<i>L. benzoin</i>	47	2	0.04	0.01
Totals		2714	318		
Site: Stanbery Park		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse
	<i>L. maackii</i>	4071	152	0.04	0.53
MPS	<i>A. saccharum</i>	126	19	0.15	0.07
	<i>C. occidentalis</i>	35	25	0.71	0.09
	<i>E. alatus</i>	130	36	0.28	0.13
	<i>F. americana</i>	22	7	0.32	0.02
	<i>F. quadrangulata</i>	3	0	0.00	0.00
	<i>L. japonica</i>	26	1100	0.42	0.04
	<i>L. vulgare</i>	72	5	0.07	0.02
	<i>R. multiflora</i>	6	5	0.83	0.02
	<i>U. americana</i>	3	0	0.00	0.00
	<i>V. dentatum</i>	129	21	0.16	0.07
	<i>Vitis</i> spp.	12	6	0.50	0.02
LPS	<i>A. glabra</i>	1	0	0.00	0.00
	<i>A. negundo</i>	1	0	0.00	0.00
	<i>A. triloba</i>	22	0	0.00	0.00
	<i>C. cordiformis</i>	1	0	0.00	0.00
	<i>E. fortunei</i>	1	0	0.00	0.00
	<i>L. benzoin</i>	76	0	0.00	0.00
	<i>P. serotina</i>	6	0	0.00	0.00
Totals		4743	287		
Site: Taylorsville Metropark		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse
	<i>L. maackii</i>	2876	267	0.09	0.76
MPS	<i>A. flava</i>	6	3	0.5	0.01
	<i>A. saccharum</i>	12	2	0.17	0.01
	<i>C. occidentalis</i>	48	12	0.25	0.03
	<i>F. americana</i>	117	17	0.15	0.05
	<i>F. quadrangulata</i>	227	22	0.1	0.06
	<i>L. tulipifera</i>	11	2	0.18	0.01
	<i>Rubus</i> spp.	7	1	0.14	0.00
	<i>Smilax</i> spp.	15	11	0.73	0.03
	<i>U. americana</i>	14	7	0.5	0.02
LPS	<i>A. negundo</i>	6	5	0.83	0.01
	<i>A. triloba</i>	8	0	0.00	0.00
	<i>T. radicans</i>	5	1	0.2	0.00
Totals		3352	350		
Site: Winton Woods		Total Twigs	Twigs Browsed	Prop. Browsed	Prop. of Browse

	<i>L. maackii</i>	698	140	0.20	0.50
MPS	<i>A. saccharum</i>	36	5	0.14	0.02
	<i>C. occidentalis</i>	62	13	0.21	0.04
	<i>E. alatus</i>	120	61	0.51	0.20
	<i>F. americana</i>	5	0	0.00	0.00
	<i>R. pseudoacacia</i>	9	6	0.67	0.02
	<i>Rubus</i> spp.	28	4	0.14	0.01
	<i>Smilax</i> spp.	8	5	0.62	0.02
	<i>U. americana</i>	46	24	0.52	0.08
	<i>U. rubra</i>	62	18	0.29	0.06
LPS	<i>A. negundo</i>	2	0	0	0.00
	<i>A. triloba</i>	29	0	0	0.00
	<i>F. grandifolia</i>	18	0	0	0.00
	<i>L. benzoin</i>	19	0	0	0.00
	<i>P. quinquefolia</i>	11	2	0.18	0.01
	<i>P. serotina</i>	378	34	0.09	0.11
	<i>T. radicans</i>	1	0	0	0.00
Total		1532	312		

Table A.2. Electivity (E_i) value of each woody species at each site (see Table 1 for full names of each species). Cells are shaded according to how much higher or lower the electivity value is compared to *L. maackii* electivity at the same site. Species were assigned to two categories based on whether they had higher or lower electivity values compared to *L. maackii* at the majority of the sites. Three taxa, *F. americana*, *Rubus* spp., and *U. rubra*, had higher electivity than *L.maackii* at some sites and lower at other sites. All were classified as ‘more preferred’ based on electivity values at sites where they were more abundant (Wright 2017).

More preferred than *L. maackii*
by a difference of:

>0.2	>0.2
≤0.2	≤0.2
≤0.1	≤0.1

Less preferred than *L. maackii*
by a difference of:

>0.2	>0.2
≤0.2	≤0.2
≤0.1	≤0.1

	Davidson Woods	Hueston Woods	Miami Whitewater-East	Miami Whitewater-West	Mt. Airy	Stanbery Park	Taylorville Metropark	Winton Woods
<i>L. maackii</i>	-0.53	-0.15	-0.06	0.57	-0.63	-0.66	-0.52	0.00
<i>A. saccharum</i>	-0.02	0.14	-0.02	-0.6	0.19	-0.27	-0.09	-0.18
<i>A. flava</i>							0.27	
<i>C. occidentalis</i>		0.34	0.16	0.233	0.32	0.59	-0.08	0.03
<i>E. alatus</i>					-1	0.2		0.44
<i>F. americana</i>	-0.13	0.044	-0.15	-0.51	-0.68	0.27	-0.34	-1
<i>F. quadrangulata</i>	-0.25	-0.12				-1	-0.51	
<i>L. vulgare</i>						-0.45		
<i>L. tulipifera</i>							-0.08	
<i>L. japonica</i>			-1			0.4		
<i>Q. muhlenbergii</i>	-0.39							
<i>R. pseudoacacia</i>			0.44					0.54
<i>R. multiflora</i>			0.3	-1		0.64		
<i>Rubus</i> spp.			0.04	-1	0.52		-0.35	-0.16
<i>Smilax</i> spp.		0.47					0.43	0.52
<i>U. americana</i>	0.53	0.34	0.37	0.53	0.29	-1	0.26	0.45
<i>U. rubra</i>				-1				0.19
<i>V. dentatum</i>						-0.06		
<i>Vitis</i> spp.						0.46		

Less-Preferred Species

<i>A. negundo</i>				0.05			-1	0.48	-1
<i>A. glabra</i>							-1		
<i>A. triloba</i>	-1	-1	-1	-1	-1				-1
<i>C. cordiformis</i>	0.17	-1					-1		
<i>E. fortunei</i>							-1		
<i>E. umbellata</i>				-1					
<i>F. grandifolia</i>				-0.6					-1
<i>L. benzoin</i>		-1	-1	-0.59	-0.76	-1			-1
<i>P. quinquefolia</i>				0.38					-0.04
<i>P. serotina</i>	-0.23	-0.23	-0.45	0.5		-1			-0.37
<i>Q. bicolor</i>	-1								
<i>T. radicans</i>	-1			-1				-0.19	-1

Table A.3. Proportion of land cover types (excluding open water) within a 1 km² buffer of the transects at each study site.

Site	Forest	Perennial Forage	Pasture/Row Crop	Urban
Davidson Woods	0.51	0.04	0.33	0.11
Hueston Woods	0.87	0.01	0.02	0.11
Miami Whitewater East	0.79	0.01	0.07	0.13
Miami Whitewater West	0.87	0.01	0.04	0.08
Mt. Airy	0.82	0.02	0.02	0.14
Stanbery Park	0.51	0.00	0.01	0.48
Taylorsville	0.34	0.02	0.49	0.14
Winton Woods	0.29	0.01	0.05	0.66