

Emry, D.J., R.J. Mercader, P.E. Bergeron, J.V. Eilert, and B.A. Riddle. 2024. Small-scale Amur honeysuckle removal and passive restoration may not create long-term success. *Natural Areas Journal* 44(2).

SUPPLEMENTAL FILES

Tables S1, S2, S3, S4

Table S1. Percent cover of the main woody species in the plots in 2016 before any treatments were applied. Paired tests were used to determine if the cover of any of the species differed between the paired plots at the start of the study.

Species		Removal	Control	Test Statistics
ASTR	Mean (\pm st. err.)	5.7 (\pm 4.97)	1.7 (\pm 0.90)	$t = -0.8511$, n.s.
	Median	0.0	0.0	$W = 6.5$, n.s.
CAOV	Mean (st. err.)	0.2 (\pm 0.11)	0.2 (\pm 0.16)	$t = 4.725 \times 10^{-8}$, n.s.
	Median	0.0	0.0	$W = 3$, n.s.
CECA	Mean (st. err.)	0.1 (\pm 0.08)	0.0 (\pm 0.00)	$t = -1$, n.s.
	Median	0.0	0.0	$W = 1$, n.s.
CEOCC	Mean (st. err.)	0.2 (\pm 0.17)	0.2 (\pm 0.12)	$t = -4.725 \times 10^{-8}$, n.s.
	Median	0.0	0.0	$W = 3$, n.s.
LOMA	Mean (st. err.)	50.7 (\pm 5.95)	47.5 (\pm 3.19)	$t = -0.5097$, n.s.
	Median	50.4	45.5	$W = 24$, n.s.
ULRU	Mean (st. err.)	0.0 (\pm 0.00)	0.4 (\pm 0.25)	$t = 1.627$, n.s.
	Median	0.0	0.0	$W = 6$, n.s.

Key to species - ASTR, *Asimina triloba*; CAOV, *Carya ovata*; CECA, *Cercis canadensis*; CEOC, *Celtis occidentalis*; LOMA, *Lonicera maackii*; ULRU, *Ulmus rubra*

Table S2. Abundance of trees and woody species within six meters of each of the plots. Each number represents a single stem $\geq 5\text{cm dbh}$.

Treatment, Block	AEGL	ASTR	CACO	CALA	CAOV	CECA	CEOCC	CODR	FRQU	GLTR	GYDI	JUNI	JUVI	LOMA	MORU	PODE	PRSE	QUMA	QUMU	QURU	QUVE	ROPS	ULAM	ULRU
Removal, 1	1	6	0	0	0	0	8	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	4
Removal, 2	0	11	0	0	0	0	4	0	0	0	0	0	0	7	1	0	0	0	0	0	0	0	0	3
Removal, 3	0	7	0	0	0	0	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	2
Removal, 4	0	0	0	3	0	1	2	1	0	0	0	0	0	11	3	0	0	0	2	0	0	0	0	0
Removal, 5	0	0	1	2	6	0	1	0	0	0	0	0	0	7	1	0	5	0	0	0	2	0	0	4
Removal, 6	0	0	1	0	3	0	2	0	1	0	0	2	0	3	5	0	0	0	0	0	2	0	0	3
Removal, 7	0	0	0	3	0	0	5	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	2
Removal, 8	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	10
Removal, 9	0	7	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2	0	5	0	0	5
Removal, 10	0	0	0	0	0	0	3	0	1	0	5	0	1	4	1	4	0	0	0	0	0	0	0	15
RemovalTotal	1	31	2	8	9	3	31	1	4	0	5	2	1	48	14	7	5	1	4	0	9	0	1	48
Control, 1	0	5	2	0	0	0	6	0	0	0	0	4	0	7	0	0	0	0	0	0	0	0	0	8
Control, 2	0	0	0	0	1	1	7	0	0	1	1	0	0	9	4	0	0	1	0	0	0	0	0	4
Control, 3	0	7	0	2	1	0	4	0	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0
Control, 4	0	0	0	0	3	1	2	0	0	0	0	0	0	5	1	0	0	0	3	1	0	0	0	0
Control, 5	0	0	0	3	8	0	3	0	0	0	0	0	1	3	2	0	0	0	2	0	0	0	0	2
Control, 6	0	0	0	0	1	0	3	0	1	0	0	0	0	2	3	0	0	0	0	0	2	0	0	5
Control, 7	0	0	1	0	2	0	4	0	0	0	0	2	0	0	4	0	0	0	1	0	0	0	0	3
Control, 8	0	0	0	0	0	1	1	0	0	0	0	0	1	7	0	5	0	0	0	0	0	0	0	11
Control, 9	0	5	3	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Control, 10	0	0	0	0	0	0	1	0	0	0	0	0	0	12	1	4	0	0	0	0	1	0	0	13
ControlTotal	0	17	6	5	17	3	32	0	1	2	1	6	3	47	15	9	0	2	6	1	4	1	0	48

Key to species - AEGL, *Aesculus glabra*; ASTR, *Asimina triloba*; CACO, *Carya cordiformis*; CALA, *Carya laciniosa*; CAOV, *Carya ovata*; CECA, *Cercis canadensis*; CEOC, *Celtis occidentalis*; CODR, *Cornus drumondii*; FRQU, *Fraxinus quadrangulata*; GLTR, *Gleditsia triacanthos*; GYDI, *Gymnocladus dioicus*; JUNI, *Juglans nigra*; JUVI, *Juniperus virginiana*; LOMA, *Lonicera maackii*; MORU, *Morus rubra*; PODE, *Populus deltoides*; PRSE, *Prunus serotina*; QUMA, *Quercus macrocarpa*; QUMU, *Quercus muehlenbergii*; QURU, *Quercus rubra*; QUVE, *Quercus velutina*; ROPS, *Robinia pseudoacacia*; ULAM, *Ulmus americana*; ULRU, *Ulmus rubra*

Table S3. Germination of woody species from soil samples taken from the plots in fall 2018. In each plot, 3.8 L of soil were collected and kept at ca. 3°C for 4 months. Soil samples were then spread in flat trays, placed in a greenhouse, and any emerging seedlings were recorded until emergence stopped (4 weeks).

Treatment, Block	<i>Ulmus</i> Species	<i>Celtis occidentalis</i>
Removal, 1	0	0
Removal, 2	0	0
Removal, 3	3	2
Removal, 4	0	0
Removal, 5	0	0
Removal, 6	1	0
Removal, 7	2	0
Removal, 8	0	0
Removal, 9	4	0
Removal, 10	3	0
mean (\pm s.e.)	1.3 (\pm 5.2)	0.2 (\pm 0.21)
Control, 1	24	0
Control, 2	0	0
Control, 3	7	0
Control, 4	1	0
Control, 5	0	0
Control, 6	1	0
Control, 7	2	0
Control, 8	0	0
Control, 9	1	0
Control, 10	6	0
mean (\pm s.e.)	4.2 (\pm 2.46)	0 (\pm 0)

Table S4. Percent cover of species within honeysuckle removal plots in 2020

Species	Plots									
	1	2	3	4	5	6	7	8	9	10
ALPE	-	0.82	1.64	-	0.82	7.38	-	-	-	-
ASCL	-	-	-	-	-	-	-	-	-	-
ASTR	-	54.92	-	-	-	-	-	-	59.84	-
CABL	4.10	-	31.15	44.26	-	-	-	-	-	1.64
CECA	-	-	-	2.46	-	-	-	-	-	-
CEOCC	-	0.82	0.82	-	0.82	-	-	-	0.82	-
EUFO	-	-	-	-	-	-	-	8.20	-	0.82
LOMA	-	-	-	5.74	-	-	-	-	-	4.92
PAQU	-	-	-	-	4.92	5.74	17.21	13.93	2.46	-
PHAM	29.51	4.92	4.10	-	31.15	4.10	3.28	-	-	-
PLOC	-	-	-	-	3.28	-	-	-	-	-
PLRU	-	-	-	-	0.82	-	-	-	-	-
POVI	-	-	-	-	-	-	-	-	-	0.82
SMHI	-	1.64	-	-	-	-	-	-	-	-
SONI	-	-	-	-	0.82	-	-	-	-	-
TORA	-	0.82	-	-	-	-	2.46	3.28	-	-
ULRU	-	-	-	-	2.46	-	0.82	-	-	-
URDI	-	-	-	-	-	-	-	-	-	-
VINE	-	4.92	8.20	2.46	0.82	7.38	-	-	2.46	-
VIRI	-	-	-	-	-	-	13.11	-	-	-
XAST	0.82	-	-	1.64	4.92	6.56	-	-	-	19.67

Key to species - ALPE, *Alliaria petiolata*; ASCL, *Asclepias* spp.; ASTR, *Asimina triloba*; CABL, *Carex blanda*; CECA, *Cercis canadensis*; CEOCC, *Celtis occidentalis*; EUFO, *Euonymus fortunii*; LOMA, *Lonicera maackii*; PAQU, *Parthenocissus quinquefolia*; PHAM, *Phytolacca americana*; PLOC, *Platanus occidentalis*; PLRU, *Polygonum virginianum*; SMHI, *Smilax hispida*; TORA, *Toxicodendron radicans*; ULRU, *Ulmus rubra*; VINE, *Viola nephrophylla*; VIRI, *Vitis riparia*; XASP, *Xanthium* spp.