

**Table 6: Buttermilk Trail West Study Area - Baseline Study Data Summary;  
JRPS Habitat Restoration Project (Phase 1) - Invasive Plant Management Plan**

Lead Data Collection Team: Friends of James River Park (V. Shivy, M. Hartley, E. Johnston)

Support Data Collection Teams: N/A

Date of Fieldwork: July 30, 2015

Total Time in Field: 12 hours



Functional Guild	Scientific Name	Common Name	Family	DCR Rank*	Suggested Treatment***	Management Unit**			
						1a	1b	2a	2b
Trees	<i>Acer platanoides</i> L.	Norway Maple	Aceraceae	M	TBD	1		1	
	<i>Ailanthus altissima</i> (P. Mill.) Swingle	Tree of Heaven	Simaroubaceae	H	TBD	1+		3+	5
	<i>Albizia julibrissin</i> Durazz.	Silktree	Fabaceae	M	TBD	1		1	2
	<i>Melia azedarach</i> L.	Chinaberrytree	Meliaceae	L	na				
	<i>Morus alba</i> L.	White Mulberry	Moraceae	L	na				
	<i>Paulownia tomentosa</i> (Thunb.) Sieb. & Zucc. ex Steud.	Princesstree	Scrophulariaceae	M	TBD	1		1	1
	<i>Pyrus calleryana</i> Dcne.	Bradford Pear	Rosaceae	M	na				
Shrubs	<i>Berberis thunbergii</i> DC.	Japanese Barberry	Berberidaceae	M	na				
	<i>Elaeagnus umbellata</i> Thunb.	Autumn Olive	Elaeagnaceae	H	TBD				1-
	<i>Euonymus alatus</i> (Thunb.) Sieb.	Burningbush	Celastraceae	H	na				
	<i>Ligustrum sinense</i> Lour.	Chinese Privet	Oleaceae	H	TBD	2	2	4	4
	<i>Lonicera maackii</i> (Rupr.) Maximowicz	Amur Honeysuckle	Brassicaceae	H	na				
	<i>Rosa multiflora</i> Thunb. ex Murr.	Multiflora Rose	Rosaceae	H	TBD				1-
Herbs/Grasses	<i>Alliaria petiolata</i> (Bieb.) Cavara & Grande	Garlic Mustard	Brassicaceae	H	TBD	1		1	
	<i>Centaurea stoebe</i> L. ssp. <i>micranthos</i> (S.G. Gmelin ex Gule)	Spotted Knapweed	Asteraceae	H	na				
	<i>Cirsium vulgare</i> (Savi) Ten.	Bull Thistle	Asteraceae	M	na				
	<i>Commelina communis</i> L.	Asiatic dayflower	Commelinaceae	L	TBD	1		1+	
	<i>Hydrilla verticillata</i> (L. f.) Royle	Hydrilla	Hydrocharitaceae	H	na				
	<i>Iris pseudacorus</i> L.	Paleyellow Iris	Iridaceae	H	na				
	<i>Lespedeza cuneata</i> (Dum.-Cours.) G. Don	Chinese Lespedeza	Fabaceae	H	TBD	1		3-	
	<i>Lysimachia nummularia</i> L.	Moneywort	Primulaceae	H	na				
	<i>Murdannia keisak</i> (Hassk.) Hand.-Maz.	Marsh Dewflower	Commelinaceae	H	na				
	<i>Persicaria longiseta</i> (de Bruyn) Moldenke	Lady's Thumb	Polygonaceae	H	na				
	<i>Phyllostachys aurea</i> Carr. ex A. & C. Rivière	Golden Bamboo	Poaceae	H	TBD		1		
	<i>Reynoutria japonica</i> Houtt.	Japanese Knotweed	Polygonaceae	M	na				
	<i>Rumex acetosella</i> L.	Common Sheep Sorrel	Polygonaceae	H	na				
	<i>Rumex crispus</i> L.	Curly Dock	Polygonaceae	M	na				
	<i>Securigera varia</i> (L.) Lassen	Crownvetch	Fabaceae	L	na				
	<i>Stellaria media</i> (L.) Vill.	Common Chickweed	Caryophyllaceae	H	na				
	<i>Urtica dioica</i> L.	Stinging Nettle	Urticaceae	M	TBD	2		2	1
<i>Arthraxon hispidus</i> (Thunb.) Makino	Small Carpgrass	Poaceae	M	na					
<i>Microstegium vimineum</i> (Trin.) A. Camus	Japanese Stiltgrass	Poaceae	H	TBD	1		1	1	
<i>Sorghum halepense</i> (L.) Pers.	Johnsongrass	Poaceae	H	TBD			1	1	
Vines	<i>Ampelopsis brevipedunculata</i> (Maxim.) Trautv.	Amur Peppervine	Vitaceae	H	na				
	<i>Celastrus orbiculata</i> Thunb. [orthographic variant]	Oriental Bittersweet	Celastraceae	H	TBD			2	1
	<i>Dioscorea polystachya</i> Turczaninow	Cinnamon Vine	Poaceae	H	na				
	<i>Euonymus fortunei</i> (Turcz.) Hand.-Maz.	Winter Creeper	Celastraceae	M	TBD			2-	3
	<i>Glechoma hederacea</i> L.	Ground Ivy	Lamiaceae	M	TBD			1+	
	<i>Hedera helix</i> L.	English Ivy	Araliaceae	M	TBD	1	5	4+	5-
	<i>Humulus japonicus</i> Sieb. & Zucc.	Japanese Hop	Cannabaceae	M	na				
	<i>Lonicera japonica</i> Thunb.	Japanese Honeysuckle	Caprifoliaceae	H	TBD		5	1+	3
	<i>Pueraria montana</i> (Lour.) Merr.	Kudzu	Fabaceae	H	TBD			1	
	<i>Vinca major</i> L.	Bigleaf Periwinkle	Apocynaceae	L	na				
	<i>Vinca minor</i> L.	Common Periwinkle	Apocynaceae	L	TBD		5	3+	1
	<i>Wisteria sinensis</i> (Sims) DC.	Chinese Wisteria	Fabaceae	M	TBD			1	
<b>Cover Class for Trees:</b>						<b>1</b>	<b>\</b>	<b>3</b>	<b>5</b>
<b>Cover Class for Shrubs:</b>						<b>2</b>	<b>2</b>	<b>4</b>	<b>4</b>
<b>Cover Class for Herbs:</b>						<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
<b>Cover Class for Vines:</b>						<b>1</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>OVERALL COVER CLASS:</b>						<b>2</b>	<b>5</b>	<b>5</b>	<b>5</b>

\*Virginia Department of Conservation and Recreation Invasiveness Ranking: H = High Invasiveness; M = Medium Invasiveness; L = Low Invasiveness

\*\*Management Units Assessed Using Modified Braun-Blanquet Cover Scale: 1 = 0-5% (BLUE); 2 = 5-20% (GREEN); 3 = 20-50% (YELLOW); 4 = 50-75% (ORANGE); 5 = 75-100% (RED)

\*\*\*Treatment practices based on Miller 2003 and JRPS Park Superintendent

Treatment Category***	Treatment Description***
<b>A</b>	Hand Removal: Removal of plant material from the soil in environmentally sensitive areas.
<b>B</b>	Goat Herd Management: Rotating herds to remove dense cover and combo treatments.
<b>C</b>	Mow-Treat Method: Application of herbicide-water mixtures to cut/damaged stems or foliage.
<b>D</b>	Cut-Treat Method: Application of herbicide-water mixtures to freshly cut stumps.
<b>E</b>	Basal Spray: Applications of herbicide-oil-penetrant mixture daubed onto lower stems.
<b>F</b>	Stem Injection: Applications of appropriate herbicide directly into tree stems.
<b>G</b>	Prescribed Burning: Drip torching and other methods utilizing experienced professionals.
<b>H</b>	Directed Foliar Spray: Application to leaves with herbicide-water-surfactant mixture.