

**Table 17: Great Shiplock Park/Chapel Island Study Area - Baseline Study Data Summary;
JRPS Habitat Restoration Project (Phase 1) - Invasive Plant Management Plan**

Lead Data Collection Team: James River Association (A. Ellis, M. Turner, L. Field, C. Banini, J. Doyle)

Support Data Collection Teams: N/A

Date of Fieldwork: August 13 and 18, 2015

Total Time in Field: 20 hours



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

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