Table 1. Non-native Species Observations, Threat Levels, and Stewardship Goals Washington Crossing State Park

	Relative		
	Threat	Stewardship	
Species	Level	Goal	Descriptive Notes
Amur Honeysuckle	Moderate	2	Throughout forests, especially post-agricultural
Asiatic Bittersweet	Moderate	2	Overall, de-vining is high priority
Autumn Clematis	Moderate	2	Forest edges
			Fields and forest edges, occassionally in shaded
Autumn Olive	High	2	forest
Border Privet	High	2	Throughout forests, especially riparian
Chinese Bushclover	High	2	Low to moderate amounts in some meadows
Chinese Silvergrass	High	1	Low amounts in some meadows
Chinese Wisteria	Very High	2	Dense patches in few areas
			Small patches, possibly planted but has potential to
Deutzia	Moderate	1	spread
English Ivy	Very High	2	Overall, de-vining is high priority
Garlic Mustard	Moderate	2	Abundant, volunteer hand pulling
Japanese Aralia	Very High	1	Two large patches
Japanese Honeysuckle	Moderate	2	Overall, de-vining is high priority
Linden Viburnum	Very High	2	Many plants, most threatening shrub
Mile-a-Minute	High	2	Throughout forest edges
Morrow's Honeysuckle	Moderate	2	Abundant, especially along edges
			Low to moderate amounts in some meadows,
Mugwort	High	2	occassional riparian
			Common, especially along edges; Susceptible to
Multiflora Rose	High	2	Rose Rosette Disease
Narrow-leaved Bittercress	Moderate	2	Throughout forests, especially post-agricultural
Trainew leaved Bittereress	Wioderate		Occassional in forests, elminate any seedlings and
Norway Maple	Moderate	2	saplings
Oriental Photinia	Very High	1	Multiple small patches
Porcelainberry	Very High	1	Occassional forest edges and shrublands
rorcciamberry	VCIYIIIgii	1	Single individual on edge of old forest; others may
Princess-tree	Moderate	2	occur at Park
		2	Occassional in forests and meadows
Siebold's Crabapple	High		Occassional in Torests and meadows
Siebold's Viburnum	Very High	2	Occassional in forests, more common in riparian
			Occassional in forests, Elminate any seedlings and
Weeping Higan Cherry	High	2	saplings
Wineberry	Moderate	2	Abundant, especially along edges
Winged Burning Bush	Very High	2	Throughout forests, espcially post-agricultural
Wintercreeper	Very High	1	Isoalated small patches, primarily in forest

Stewardship Goal Notes:

- 1 = Eradicate all observed individuals
- 2 = Control through a long-term program
- 3 = Do not treat unless resources allow (only Very High, High or Moderate Threat species)

See Strike Team website for "Species List and Control Recommendations" and "Herbicide Use Suggestions and Mixing Table"

Table 2. Selected Invasive Species Points Washington Crossing State Park

	Species	Population		
Common Name	Code	Size	Latitude	Longitude
Deutzia	DESC	2-10	40.30739267	-74.86092171
English IVy	HEHE	2-10	40.30892195	-74.85393361
Japanese Aralia	AREL	>1000	40.31431233	-74.85988424
Japanese Aralia	AREL	11-100	40.30037486	-74.86633744
Oriental Photinia	PHVI	2-10	40.31327244	-74.86201354
Oriental Photinia	PHVI	2-10	40.29995492	-74.86577059
Oriental Photinia	PHVI	2-10	40.30020464	-74.86681849
Princess-tree	PATO	1	40.3154209	-74.85939428
Siebold's Viburnum	VISI	2-10	40.29969316	-74.86519083
Wintercreeper	EUFO	11-100	40.30822056	-74.85914953

Table 3. Native Species Observed (very incomplete list) Washington Crossing State Park

Туре	Species Name
Trees	American Beech
	American Holly
	Black Oak
	Chestnut Oak
	Pin Oak
	Red Maple
	Red Oak
	Shagbark Hickory
	Sugar Maple
	Sweet Gum
	Tulip Poplar
	White Ash
	White Oak
	Wild Black Cherry
Shrubs	Arrowwood Viburnum
	Allegheny Blackberry
	Maple-leaved Viburnum
	Spicebush
Vines	Creeping Dewberry
	Poison-ivy
	Virginia Creeper
Herbs	Black Cohosh
	Christmas Fern
	Deertongue Grass
	Dogbane
	Indian Grass
	Panic Grass
	Rattlesnake Root
	Sensitive Fern
	Solomon's Seal
	Stoneroot
	Striped Wintergreen
	Sweet Cicely
	Various rushes and sedges
	White Snakeroot
	White Wood Aster
	Wreath Goldenrod

Table 4. Stewardship Summary Washington Crossing State Park

	Relative	
Goal	Priority	Description
		Improve Deer Management Program: Establish harvest quotas to meet a density goal
1	Very High	of 30 deer per square mile
		Early Detection & Rapid Response: Eliminate 6 species beginning to emerge on the
		site - See Table 1. Also include single Princess-tree on edge of old forest see Table 2
2	Very High	for coordinates.
		Old Forest Enhancement Projects: 1) Install multiple 'micro-exclosures' (50-foot
		circumfrence, 5' tall fence areas) to a) Protect existing concentrations of wildflowers
		and tree seedlings, b) Protect canopy gaps, and c) Encourage competition to reduce
		Japanese Stiltgrass patches; 2) Individual cages to protect tree and shrub seedlings, 3)
		Perform invasive species control (pulling and/or herbicide applications) to maintain
		very low infestation levels; and 4) Tree planting / Reforestation to buffer edges of old
		forest patches that meet fields Note: Projects should be grouped in one old forest
		patch at a time, once significant progress has been made, move to another patch. The
3	High	patch next to the camp ground is a good candidate to start stewardship efforts.
		<u>Tree Planting / Reforestation</u> : Low quality meadow patches can be transitioned to
		young forest patches via planting and caging trees. It is recommended that planting of
		larger trees > 5' tall be planted (7-gallon pots cost approxitately \$70 each), fitted with
		plastic mesh buck rub guards. Smaller trees more amenable to scout plantings are also
		a good choice, but cages must be mainted for at least several years. Example:
	High	Meadows in southeast corner of Park near arboretum.
		Meadow Restoration: This is often best left to contractors with specialized equipment
		to eliminate existing vegetation and install native seed mix, but another strategy is to
		cease mowing and plant patches of wildflower plugs (good scout projects) to
		eventually devlop a diverse meadow. Example: Mowed area with dying trees along
		Continental Lane (this area could also be a good candidate for Tree Planting /
	Moderate	Reforestation).
	Moderate	<u>De-vining trees:</u> Throughout the Park, see Table 1 for vine species of greatest concern.
		Heavily Damaged Areas: The Park contains large areas of post-agricultural forests with
		and without extensive ash death, heavily infested shrublands, and tornado damaged
		areas. The challenges presented by these areas would require extraordinary amounts
		of resource to foster ecological health improvements. They would also require
	Low	extensive contractor work using heavy equipment to clear invasives, etc.