0 Langley Road, Avon, MA

1/26/2022

Control of Invasive Species

Invasive species observed on site include Japanese knotweed, garlic mustard, bittersweet and mile a minute vine.

Species Japanese knotweed	Treatment 5cc of >40% glyphosate (Roundup) injected in the lower stem between the 1^{st} and 2^{nd} node within upland areas. Aquamaster herbicide in areas adjacent to the wetlands	Time Frame June and late August/early September
Garlic Mustard	Hand pulled or 1-2% glyphosate (Roundup) dabbed with herbicide applicator.	Hand pulled prior to seed set* chemical anytime.
Asian Bittersweet	Cut stems at 2 inches and treat cut with >40% glyphosate (Roundup).	Anytime
Mile-a-minute Vine	Repeated mowing/ hand pulling through the season to keep the plant from flowering and setting seed. Foliar herbicide application.	Hand pulled prior to seed set* chemical anytime.

Disposal

Non-woody vegetation will be bagged, set in the sun to bake, and then sent to a trash landfill.

Tree Planting and Naturalization

Trees will planted according to Buffer Zone Restoration Plan designed and supervised by 5 Wetlands.

Japanese Knotweed Polygonum cuspidatum

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Flowering Period											
Med	Mechanical Cut/Mow				Sho	rt Term		Small Areas			
*Foliar Spray Glyphosate					Long Term Control				Large Areas		
Inj	Injection Glyphosate			Long Term Control			Small Areas				
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*Most effective management technique(s)

Notes: Foliar spray is most effect for Japanese Knotweed during flowering, care should be taken not to spray during peak pollinator hours.

Disposal: Japanese knotweed cuttings readily root, even small stems, do not compost.

Tips: Stem fragments will readily root, clean off equipment before leaving management site

Mile-a-Minute Vine *Persicaria perfoliata*

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Flowering Period											
Mechanical Pull				Short/	'Long Te	Small Areas					
*Mechanical			Mowing			Short term Control				Large Areas	
*Foliar Spray			Glyphosate			Long	g Term C	Large Areas			
*Pre-emergent T		Triflurali	in		Lon	g Term C	ontrol	Sm	nall/Large	e Areas	
	*Mast offective menagement technique(s)										

*Most effective management technique(s)

Notes: Pulling early in the season, before flowering, can reduce the population considerably.

Disposal: Leave bagged plants on site to allow the weevils to pupate and fly away.

Tips: Return to sites every year to evaluate population size.

Oriental Bittersweet Celastrus orbiculatus

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Flowering Period											
Med	chanical		Cutting	5		Short Term Control			Small/Large Areas		
Med	Mechanical Pull (young plants)					Short Term Control			Small Areas		
*Cu	it/Paint Glyphosate/ Triclopyr		yr	Long Term Control			Small/Large Areas				
F	Foliar Glyphosate/ Triclopyr		yr	Short/Lo	ong Term	n Control		Large A	reas		

*Most effective management technique(s)

Notes: Cutting bittersweet stems stimulates new growth, follow-up is necessary.

Disposal: Bittersweet can be left to compost on site if fruit isn't present/mature.

Tips: Don't rip down cut stems of bittersweet as it may damage the tree.

Garlic Mustard *Alliaria petiolata*

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Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Flowering Period											
*Me	*Mechanical Pull			Short/	Long Te	rol	Small Areas				
Mechanical M		Mowing			Short term Control				Large Areas		
*Foliar Spray			Gly	phosate		Long	g Term C	Control	·	Large A	reas

*Most effective management technique(s)

Notes: Pull second year plants in the spring months and the first year plants in the fall.

Disposal: Leave plants without flowers on site after pulling.

Tips: Pull early in the season before flowers begin to elongate.