

Controlling Invasives; Estimating the Costs of Native Landscape Restoration

Introduction

The science of controlling or even eradicating exotic, invasive plants is now becoming better known. However, there are few sources of information for park managers wishing to estimate the costs of such land restoration.

In November of 2007, the PA Recreation and Park Society's Park Resource Branch hosted a 'Resource Operations Workshop' at Cabela's in Hamburg, PA. One of the featured speakers was Steve Manning, founder of Invasive Plant Control, Inc., a firm from Tennessee specializing in removing a variety of land-based and aquatic invasives.

From his experience in this field, Steve has prepared a method of estimating costs, based upon level of infestation and method of control.

For a comprehensive approach, consider the following two points:

1. Add in the cost of followup control, and monitoring, which must occur for several years. Many invasives are known for their ability to send up new shoots when the main plant is cut. And, seed stock will provide a new source for plants for at least one year, and often two to three.

2. Remember to add the costs of planting to areas where invasives are removed. Invasives are opportunistic; they thrive in areas disturbed by construction, removal of vegetation from meadows and streambanks, or opening of the forest

canopy. It is essential to replace those plants removed, even if invasives, with natives that can provide competition and shade.

– John P. Mikowychok, Membership Secretary
Park Resource Branch, PRPS

The costs which follow were based on 2007 labor rates.

For the hourly rate, take the daily rate (about \$1,200) and divide by 16 (two crew for an eight-hour day). The costs are based upon \$75 per hour for a crew to be on site. Add changes if other equipment is needed such as large chippers and trucks to haul debris. The cost ultimately works out to around \$1,200 per day for a crew.

For more information, or a quote on
invasives control, contact:

Steve Manning
Invasive Plant Control, Inc.
P. O. Box 50556
Nashville TN 37205

Telephone:
615-969-1309

E-Mail:
stevemanning@mindspring.com

website:
www.invasiveplantcontrol.com

Plant Genus, species	Common Name	Methodology of Control
<i>Berberis thunbergii</i>	Japanese Barberry	CT, HP, FST, FSB
<i>Berberis vulgaris</i>	Common Barberry	CT, HP, FST, FSB
<i>Buddleja davidii</i>	Butterfly Bush	CT, HP, FST, FSB
<i>Conium maculatum</i>	Poison Hemlock	FST, FSB
<i>Elaeagnus angustifolia</i>	Russian Olive	CT, HP, FST, FSB, BB
<i>Elaeagnus pungens</i>	Thorny Elaeagnus	CT, HP, FST, FSB, BB
<i>Elaeagnus umbellata</i>	Autumn Olive	CT, HP, FST, FSB, BB
<i>Euonymus alata</i>	Winged Burning Bush	CT, HP, FST, FSB, BB
<i>Euonymus europaea</i>	European Spindle Tree	CT, HP, FST, FSB
<i>Frangula alnus</i>	Glossy Buckthorn	CT, HP, FST, FSB
<i>Hibiscus syriacus</i>	Rose-of-Sharon	CT, HP, FST, FSB, BB
<i>Ilex aquifolium</i>	English Holly	CT, HP, FST, FSB, BB
<i>Laegerstroemia indica</i>	Crape Myrtle	CT, HP, FST, FSB
<i>Ligustrum amurense</i>	Amur privet	CT, HP, FST, FSB, BB
<i>Ligustrum obtusifolium</i>	Border Privet	CT, HP, FST, FSB, BB
<i>Ligustrum ovalifolium</i>	California Privet	CT, HP, FST, FSB, BB
<i>Ligustrum sinense</i>	Chinese Privet	CT, HP, FST, FSB, BB
<i>Ligustrum vulgare</i>	Common Privet	CT, HP, FST, FSB, BB

Plant Genus, species	Common Name	Methodology of Control
<i>Lonicera maackii</i>	Amur Honeysuckle	CT, HP, FST, FSB
<i>Lonicera morrowii</i>	Morrow's Honeysuckle	CT, HP, FST, FSB
<i>Lonicera standishii</i>	Standish's Honeysuckle	CT, HP, FST, FSB
<i>Lonicera tatarica</i>	Tartarian Honeysuckle	CT, HP, FST, FSB
<i>Lonicera x bella</i>	Showy Bush Honeysuckle	CT, HP, FST, FSB
<i>Lonicera xylosteum</i>	European Fly honeysuckle	CT, HP, FST, FSB
<i>Poncirus trifoliata</i>	Trifoliolate Orange	CT, HP, FST, FSB, BB
<i>Rhamnus cathartica</i>	Common Buckthorn	CT, HP, FST, FSB
<i>Rhodotypos scandens</i>	Black Jetbead	CT, HP, FST, FSB
<i>Rosa multiflora</i>	Multiflora Rose	CT, HP, FST, FSB, BB
<i>Rosa rugosa</i>	Japanese Rose	CT, HP, FST, FSB, BB
<i>Viburnum dilatatum</i>	Linden Viburnum	CT, HP, FST, FSB, BB
<i>Viburnum lantana</i>	Wayfaring Tree	CT, HP, FST, FSB, BB
<i>Viburnum opulus</i> var. <i>opulus</i>	Guelder Rose	CT, HP, FST, FSB, BB
<i>Viburnum plicatum</i>	Japanese Snowball	CT, HP, FST, FSB, BB
<i>Viburnum sieboldii</i>	Siebold Viburnum	CT, HP, FST, FSB, BB

Key to Treatment Methodology:

BB Basal Bark

CT Cut and Treat Stumps

FS Foliar Spray

FSB Foliar Spray with Backpacks or Spot Spray

FST Foliar Spray with Truck or Tractor Boom

HP Hand Pull

Method-ology	Level of Intensity	Cost Per Acre	Cost Per Day
Basal Bark			
	High	\$2,400.00	\$1,250.00
	Medium	\$1,200.00	\$1,250.00
	Low	\$600.00	\$1,250.00
Foliar Spray with Backpacks or Spot Spray			
	High	\$1,200.00	\$1,250.00
	Medium	\$600.00	\$1,250.00
	Low	\$300.00	\$1,250.00
Foliar Spray with Truck or Tractor Boom			
	High	\$200.00	\$1,250.00
	Medium	\$200.00	\$1,250.00
	Low	\$200.00	\$1,250.00
Cut and Treat Stumps			
	High	\$5,000.00	\$1,250.00
	Medium	\$2,500.00	\$1,250.00
	Low	\$1,000.00	\$1,250.00
Hand Pull			
	High	\$8,000.00	\$1,250.00
	Medium	\$4,000.00	\$1,250.00
	Low	\$2,000.00	\$1,250.00