

Practice: 314 - Brush Management

Scenario # 1 Mechanical, Hand tools

Scenario Description: Actual Scenario # 1

New York

Using hand tools, such as axes, shovels, hoes, nippers, brush pullers, and including chainsaws to remove or cut off woody plants at or below the root collar. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have stands of woody and non herbaceous species that are in the early phases of invasions. Typical unit is 10 acres.

Associated Practices: Early Successional Habitat Development and Management (647), Restoration of Rare and Declining Habitats (643), Shallow Water Development and Management (646), Upland Wildlife Habitat Management (645), Wetland Wildlife Habitat Management (644)

Before Practice Situation:

Area is in the very early phases of woody non herbaceous species encroachment that degrades habitat for desired wildlife species. Future degradation of key forage species and ecological site condition promoting noxious and invasive species and increased soil erosion if woody species are allowed to expand.

After Practice Situation:

Woody species are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition continues to progressing in an upward trend, hydrology and plant health and vigor are sustained.

Scenario Feature Measure:

Acres treated

Scenario Typical Size:	10	Acre	Tot Unit Cost	\$319.70
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Chainsaw	25	Hour	\$6.90	\$172.50
Equip./Install.	Brush Chipper, 6" capacity	25	Hour	\$24.24	\$606.00
Equip./Install.	Truck, Pickup	2	Hour	\$40.77	\$81.54
Equip./Install.	Pruning tools, hand tools	25	Hour	\$1.09	\$27.25
Labor	Skilled Labor	25	Hour	\$39.82	\$995.50
Labor	General Labor	50	Hour	\$23.16	\$1,158.00
Mobilization	Mobilization, very small equipment	2	Each	\$78.08	\$156.16

Payment types: Total Cost: \$3,196.95

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$239.77	EQIP-HU	\$287.73
WHIP	\$239.77	WHIP-HU	\$287.73

Practice: 314 - Brush Management
Scenario # 2 Hand Tools and Chemical Treatment

Scenario Description: Actual Scenario # 2 New York

Using hand tools, such as axes, shovels, hoes, nippers, brush pullers, and including chainsaws to remove or cut off woody plants at or below the root collar. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have stands of woody and non herbaceous species that are in the early phases of invasions. Typical unit is 10 acres.

Associated Practices: Early Successional Habitat Development and Management (647), Restoration of Rare and Declining Habitats (643), Shallow Water Development and Management (646), Upland Wildlife Habitat Management (645), Wetland Wildlife Habitat Management (644)

Before Practice Situation:

Area is in the very early phases of woody non herbaceous species encroachment that degrades habitat for desired wildlife species. Future degradation of key forage species and ecological site condition promoting noxious and invasive species and increased soil erosion if woody species are allowed to expand.

After Practice Situation:

Woody species are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition continues to progressing in an upward trend, hydrology and plant health and vigor are sustained.

Scenario Feature Measure:

Acres treated

Scenario Typical Size:	10	Acre	Tot Unit Cost	\$477.10
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Truck, Pickup	2	Hour	\$40.77	\$81.54
Equip./Install.	Brush Chipper, 6" capacity	25	Hour	\$24.24	\$606.00
Equip./Install.	Pruning tools, hand tools	25	Hour	\$1.09	\$27.25
Equip./Install.	Chainsaw	25	Hour	\$6.90	\$172.50
Labor	Skilled Labor	25	Hour	\$39.82	\$995.50
Labor	General Labor	50	Hour	\$23.16	\$1,158.00
Mobilization	Mobilization, very small equipment	2	Each	\$78.08	\$156.16
Materials	Herbicide, Imazapyr	5	Acre	\$42.03	\$210.15
Equip./Install.	Truck, Pickup	3	Hour	\$40.77	\$122.31
Equip./Install.	Chemical, spot treatment, single	20	Hour	\$62.08	\$1,241.60

Payment types:				Total Cost:	\$4,771.01
	PayType	Unit Payment		PayType	Unit Payment
	EQIP	\$357.83		EQIP-HU	\$429.39
	WHIP	\$357.83		WHIP-HU	\$429.39

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Scenario # 3 Mechanical, Light Equipment

Scenario Description: Actual Scenario # 3

New York

Removal of small woody vegetation of heavy infestations on gentle sloping to moderately deep to deep soils. The practice entails the removal of brush by the use of mechanical cutter, chopper or other light equipment in order to reduce fuel loading and improve ecological site condition. Brush density has exceeded desired levels based on ecological site potential. Only the infestation of the area is treated. Typical unit is 10 acres.

Associated Practices: Early Successional Habitat Development and Management (647), Restoration of Rare and Declining Habitats (643), Shallow Water Development and Management (646), Upland Wildlife Habitat Management (645), Wetland Wildlife Habitat Management (644)

Before Practice Situation:

Area consist of excessive stands of shrub species degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Practice Situation:

Woody species are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure:

Acres planned

Scenario Typical Size:	10	Acre	Tot Unit Cost	\$134.11
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Mower, Bush Hog	10	Hour	\$55.71	\$557.10
Equip./Install.	Truck, Pickup	4	Hour	\$40.77	\$163.08
Labor	Equipment Operators, Light	10	Hour	\$24.05	\$240.50
Mobilization	Mobilization, small equipment	2	Each	\$190.19	\$380.38

Total Cost: \$1,341.06

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$100.58	EQIP-HU	\$120.70
WHIP	\$100.58	WHIP-HU	\$120.70

Practice: 314 - Brush Management

Scenario # 4 Mechanical, Heavy Equipment

Scenario Description: Actual Scenario # 4

New York

Removal of large woody vegetation of heavy infestations on gentle sloping to moderately deep to deep soils. The practice entails the removal of brush by pushing, grubbing, masticating, chaining then raking or piling in order to reduce fuel loading and improve ecological site condition. Brush density has exceeded desired levels based on ecological site potential. It has been determined that the brush is at the heavy infestation. Only the infestation of the area is treated. Infestation covers over 60% of the field. Typical unit is 10 acres.

Before Practice Situation:

Area consist of excessive stands of shrub species degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Practice Situation:

Woody species are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure:

Acres planned

Scenario Typical Size:	10	Acre	Tot Unit Cost	\$790.70
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Mechanical cutter, chopper	40	Hour	\$140.87	\$5,634.80
Equip./Install.	Truck, Pickup	6	Hour	\$40.77	\$244.62
Labor	Equipment Operators, Heavy	40	Hour	\$36.55	\$1,462.00
Mobilization	Mobilization, medium equipment	2	Each	\$282.78	\$565.56

Total Cost: \$7,906.98

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$593.02	EQIP-HU	\$711.63
WHIP	\$593.02	WHIP-HU	\$711.63

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Scenario # 5 Light Mechanical and Chemical

Scenario Description: Actual Scenario # 5

New York

Removal of small woody vegetation of heavy infestations on gentle sloping to moderately deep to deep soils. The practice entails the removal of brush by the use of mechanical cutter, chopper or other light equipment followed by an application of low cost chemicals in low volumes of material in order to reduce fuel loading and improve ecological site condition. Brush density has exceeded desired levels based on ecological site potential. It has been determined that the brush is at the heavy infestation. Only the infestation of the area is treated. Typical unit is 10 acres.

Before Practice Situation:

Area consist of excessive stands of shrub species degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Practice Situation:

Woody species are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure:

Acres planned

Scenario Typical Size:	10	Acre	Tot Unit Cost	\$495.70
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Herbicide, Glyphosate	10	Acre	\$15.83	\$158.30
Equip./Install.	Truck, Pickup	4	Hour	\$40.77	\$163.08
Equip./Install.	Mower, Bush Hog	30	Hour	\$55.71	\$1,671.30
Equip./Install.	Chemical, spot treatment, single	30	Hour	\$62.08	\$1,862.40
Labor	Equipment Operators, Light	30	Hour	\$24.05	\$721.50
Mobilization	Mobilization, small equipment	2	Each	\$190.19	\$380.38

Total Cost: \$4,956.96

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$371.77	EQIP-HU	\$446.13
WHIP	\$371.77	WHIP-HU	\$446.13

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Scenario # 6 Chemical, Individual Plant Treatment

Scenario Description: Actual Scenario # 6

New York

This Practice is for the implementation of brush management on range, pasture or native pasture using Individual Plant Treatment (IPT). The typical method of control is application of herbicides (basal or foliar location) on selected individual plants. Associated Practices: Early Successional Habitat Development and Management (647), Restoration of Rare and Declining Habitats (643), Shallow Water Development and Management (646), Upland Wildlife Habitat Management (645), Wetland Wildlife Habitat Management (644)

Before Practice Situation:

Brush species exceed desired levels resulting in degraded plant condition, loss of forage production, or degraded wildlife habitat. Densities of brush exceed levels indicated in the ecological site descriptions.

After Practice Situation:

Brush has been treated to a level which results in improved plant condition, forage production, or wildlife habitat. The typical method of control is application of herbicides (basal or foliar location) on selected individual plants.

Scenario Feature Measure:

Acres treated

Scenario Typical Size:	10	Acre	Tot Unit Cost	\$95.71
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Herbicide, Imazapyr	2	Acre	\$42.03	\$84.06
Equip./Install.	Truck, Pickup	3	Hour	\$40.77	\$122.31
Equip./Install.	Chemical, spot treatment, single	10	Hour	\$62.08	\$620.80
Equip./Install.	All terrain vehicles, ATV	2.5	Hour	\$33.68	\$84.20
Labor	Supervisor or Manager	1	Hour	\$45.77	\$45.77

Total Cost: \$957.14

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$71.79	EQIP-HU	\$86.14
WHIP	\$71.79	WHIP-HU	\$86.14

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Scenario # 7 Chemical, Intense Individual Plant Treatment

Scenario Description: Actual Scenario # 7

New York

Individual plant treatment (IPT) is applied to high density, heavy brush for treatment of a sensitive area, such as bog turtle habitat. The typical method of control is application of herbicides (basal or foliar location) on selected individual plants.

Associated Practices: Early Successional Habitat Development and Management (647), Restoration of Rare and Declining Habitats (643), Shallow Water Development and Management (646), Upland Wildlife Habitat Management (645), Wetland Wildlife Habitat Management (644)

Before Practice Situation:

The existing stand consists of unwanted/undesirable species and the stocking rate exceeds the recommended level. Undersirable species consist of hardwoods and shrubs that can propogate via root systems that make commercial control unfeasible.

After Practice Situation:

Brush has been treated to a level which results in improved plant condition, forage production, or wildlife habitat. The typical method of control is application of herbicides (basal or foliar location) on selected individual plants at a rate of 100 stems per acre.

Scenario Feature Measure:

Acre treated

Scenario Typical Size:	1	Acre	Tot Unit Cost	\$333.77
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Herbicide, Imazapyr	0.6	Acre	\$42.03	\$25.22
Equip./Install.	Truck, Pickup	3	Hour	\$40.77	\$122.31
Equip./Install.	Chemical, spot treatment, single	3	Hour	\$62.08	\$186.24

Total Cost: \$333.77

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$250.33	EQIP-HU	\$300.39
WHIP	\$250.33	WHIP-HU	\$300.39