

**Scenario Worksheet**

**Practice and Scenario Description:**

<b>Information Type</b>	<b>Data</b>
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	10
Scenario Name	Crop/Mast Tree Release
Scenario Description	Crop or wildlife mast trees will be released from competition through a crown release consistent with recommendation in an approved Forest Management and/or Conservation Plan. Typical situation is to release on 3-4 sides. Unacceptable growing stock will be culled through this process focusing growth on crop or mast trees increasing growth, health and mast production. Wildlife habitat will be maintained through retention of important habitat elements such as large woody debris and snags.
Before Practice Situation	Undesirable growing stock are competing with desirable tree species and/or growing stock, limiting plant productivity, health and vigor and wildlife habitat. Overstocked stands are limiting tree growth, increasing potential for disease, limiting flowering/fruitle potential and amount of mast available to wildlife. These overstocked stands typically have limited under and midstory development limiting cover for wildlife.
After Practice Situation	Desirable tree species and/or growing stock have been released from competition by cutting trees with competing crowns. The result is increase in growth rates, improvement in forest health, and wildlife habitat. Desirable timber trees and valuable trees for wildlife now have free growing space. Wildlife habitat is improved through increased food/mast production and understory development with potential for large wildlife tree development (nest, den, cavity trees).
Scenario Feature Measure	
Scenario Unit	Acre
Scenario Typical Size	10

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$219.20	\$21.92
Labor	\$2,247.36	\$224.74
Mobilization	\$485.24	\$48.52
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,951.80	\$295.18

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.48	40	\$219.20
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	8	\$665.76
Labor	230	Skilled Labor	Labor requiring a high level skill set: includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.54	40	\$1,581.60
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	2	\$171.40
Mobilization	1141	Mobilization, Skilled labor	Mobilization of skilled labor: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.23	8	\$313.84

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	7
Scenario Name	Creating Patch Clearcuts
Scenario Description	Creating 2 acre patches in over-mature and/or degraded stands using hand tools such as chainsaws. Resource concerns include: Undesirable plant productivity and health, Inadequate structure and composition, and habitat degradation.
Before Practice Situation	The existing stand is overly mature and/or has been degraded in value by past harvesting practices. The level of acceptable growing stock is too low to justify managing this stand in its present condition. The present form, species composition and structure cannot meet the resource concerns and landowner objectives. Creating small openings by cutting all trees greater than 2" in diameter will foster the regeneration of high-value shade intolerant species. The work will be done with chainsaws.
After Practice Situation	A new, young stand of desirable species is established. In addition, early successional wildlife habitat as well as forest type diversity are created.
Scenario Feature Measure	Area treated
Scenario Unit	Acre
Scenario Typical Size	2

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$140.70	\$70.35
Labor	\$577.80	\$288.90
Mobilization	\$190.54	\$95.27
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$909.04	\$454.52

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.48	16	\$87.68
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	2	\$53.02
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	2	\$166.44
Labor	231	General Labor	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$25.71	16	\$411.36
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	1	\$85.70
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$26.21	4	\$104.84

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	1
Scenario Name	Pre-commercial Thinning - Hand tools
Scenario Description	Adjusting the stocking of a young, non-merchantable stand of trees. The operation is supervised by a consultant forester and is carried out using hand tools such as chainsaws. Resource concerns include Undesirable plant productivity and health; Wildlife habitat degradation; Wildfire hazard; and Inadequate structure and composition.
Before Practice Situation	The stocking of a stand of trees that are too small to make a commercial thinning exceeds the recommended fully stocked level for the species and site. The effect is much slower growth than is reasonable or expected for the site, increased susceptibility to insects and disease, and an unacceptable devastating wildfire risk.
After Practice Situation	After adjusting the stocking to an acceptable level, stand growth, condition, and overall quality is improved. In addition, wildlife habitat is improved with the resulting increase of sunlight reaching the forest floor.
Scenario Feature Measure	Area treated
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$475.12	\$47.51
Labor	\$2,232.72	\$223.27
Mobilization	\$671.46	\$67.15
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$3,379.30	\$337.93

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.48	48	\$263.04
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	8	\$212.08
Labor	231	General Labor	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$25.71	48	\$1,234.08
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	12	\$998.64
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	6	\$514.20
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$26.21	6	\$157.26

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	8
Scenario Name	Thinning for Forest Health and Wildlife
Scenario Description	A combination of silvicultural treatments used to open the canopy of a stand to improve tree health and wildlife habitat. Resource concerns include: Inadequate structure and composition, Undesirable plant productivity and health, and Habitat degradation.
Before Practice Situation	The stand of mature trees is overstocked resulting in a closed canopy. This condition is causing a lack of structure, herbaceous layer, and diversity that is needed to meet the landowner's objectives for improved wildlife habitat and forest health. Under the supervision of a consultant forester, it will be marked for thinning and timber stand improvement applications that will include cutting with hand tools (chainsaws) and injection. Costs involved in any commercial harvesting including marking, access, and transportation are not included in this scenario. However the costs involved in marking trees to be treated or left and supervising the TSI work is included.
After Practice Situation	The stand is treated to favor diversity of important commercial and wildlife species. The canopy is opened to the extent necessary to promote herbaceous growth and the work is performed without excessive damage to the residual trees and site.
Scenario Feature Measure	Acres treated
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$50.20	\$5.02
Equipment/Installation	\$1,119.28	\$111.93
Labor	\$2,874.12	\$287.41
Mobilization	\$3,676.71	\$367.67
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$7,720.31	\$772.03

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	313	Tree Marking Paint	Trees to be cut through tree marking are physically identified through the application of paint on the tree. Typically one quart of paint is used to mark one acre of trees.	Acre	\$5.02	10	\$50.20
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$19.28	30	\$578.40
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.48	60	\$328.80
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	8	\$212.08
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	16	\$1,331.52
Labor	231	General Labor	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$25.71	60	\$1,542.60
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	6	\$514.20
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$26.21	15	\$393.15
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	6	\$1,645.98
Mobilization	1138	Mobilization, small equipment	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$187.23	6	\$1,123.38

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## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	9
Scenario Name	Tree Marking
Scenario Description	The marking of a forest stand by a professional forester, in accordance with recommendations in an approved Forest Management or Conservation Plan, to improve the health, productivity and vigor of the stand, and improve wildlife habitat. The cost for this scenario is based on the labor for a professional forester or wildlife biologist to provide timber marking to ensure that the treatment is silviculturally sound and damage to the residual stand is minimized. There is no cost of the wood removal since a commercial logger will be doing the work.
Before Practice Situation	An overstocked stand of mixed aged species that are growing slowly, and prone to forest health problems do to high stand density. Wildlife habitat is degraded, due to the species composition and competition which is reducing mast production and reducing the understory plant population.
After Practice Situation	The stand is treated to favor diversity of important commercial and wildlife species. The canopy is opened to the extent necessary to promote herbaceous growth and the work is performed without excessive damage to the residual trees and site.
Scenario Feature Measure	
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$75.30	\$7.53
Equipment/Installation	\$0.00	\$0.00
Labor	\$665.76	\$66.58
Mobilization	\$171.40	\$17.14
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$912.46	\$91.25

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	313	Tree Marking Paint	Trees to be cut through tree marking are physically identified through the application of paint on the tree. Typically one quart of paint is used to mark one acre of trees.	Acre	\$5.02	15	\$75.30
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	8	\$665.76
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	2	\$171.40

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**Practice and Scenario Description:**

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Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	4
Scenario Name	Timber Stand Improvement - Chemical, Aerial
Scenario Description	Using aerially applied chemicals to release desirable trees from competing and/or overtopping vegetation. Resource concerns include: Undesirable plant productivity and health, and Wildlife habitat degradation.
Before Practice Situation	An adequately stocked stand of desirable species and trees is not growing to its potential for the site due to severe competition from undesirable trees and brush. Releasing the desirable trees from the competition will be achieved through the application of appropriate herbicides according to label directions. Application will be by helicopter as an over-the-top spray. The work will be professionally planned and supervised.
After Practice Situation	The released stand of trees contains the composition and quality needed to meet the landowner's objectives and address the resource concerns.
Scenario Feature Measure	Area treated
Scenario Unit	Acre
Scenario Typical Size	40

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,216.00	\$80.40
Equipment/Installation	\$1,183.20	\$29.58
Labor	\$333.44	\$8.34
Mobilization	\$330.40	\$8.26
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$5,063.04</b>	<b>\$126.58</b>

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1095	Herbicide, Surfactant	Surfactants reduce the surface tension of water to produce more uniform coverage and penetration of herbicides, and weed killers. Paraffin Based Petroleum Surfactant. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	\$1.09	40	\$43.60
Materials	336	Herbicide, Imazapyr	Pre and post-emergent, non-selective herbicide for control of undesirable vegetation in non-crop areas. Product is typically used in these practices 314, 595, 666 and 645. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	\$79.31	40	\$3,172.40
Equipment/Installation	1991	Chemical, aerial application, helicopter	Chemical application performed by helicopter on forest only. Includes equipment, mobilization, and labor.	Acre	\$29.58	40	\$1,183.20
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	8	\$333.44
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$41.30	8	\$330.40

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	3
Scenario Name	Timber Stand Improvement - Chemical, Ground
Scenario Description	Using ground applied chemicals to release young desirable trees from competing and/or overtopping vegetation. Resource concerns include: Undesirable plant productivity and health, and Wildlife habitat degradation.
Before Practice Situation	An adequately stocked stand of desirable species and trees is not growing to its potential for the site due to severe competition from undesirable trees and brush. Releasing the desirable trees from the competition will be achieved through the application of appropriate herbicides according to label directions. Application will be by ground equipment as an over-the-top spray.
After Practice Situation	The released stand of trees contains the composition and quality needed to meet the landowner's objectives and address the resource concerns.
Scenario Feature Measure	Acres treated
Scenario Unit	Acre
Scenario Typical Size	5

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$804.00	\$160.80
Equipment/Installation	\$171.04	\$34.21
Labor	\$674.24	\$134.85
Mobilization	\$94.68	\$18.94
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,743.96	\$348.79

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1095	Herbicide, Surfactant	Surfactants reduce the surface tension of water to produce more uniform coverage and penetration of herbicides, and weed killers. Paraffin Based Petroleum Surfactant. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	\$1.09	10	\$10.90
Materials	336	Herbicide, Imazapyr	Pre and post-emergent, non-selective herbicide for control of undesirable vegetation in non-crop areas. Product is typically used in these practices 314, 595, 666 and 645. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	\$79.31	10	\$793.10
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	4	\$106.04
Labor	230	Skilled Labor	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.54	8	\$316.32
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.90	8	\$191.20
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	4	\$166.72
Mobilization	1143	Mobilization, Light Equipment Operator	Mobilization of light equipment operators: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.67	4	\$94.68
Mobilization	1141	Mobilization, Skilled labor	Mobilization of skilled labor: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.23		\$0.00
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$41.30		\$0.00

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	6
Scenario Name	Competition Control - Mechanical, Heavy Equipment
Scenario Description	Using equipment such as a masticator or mulcher to control vegetation that is competing with desirable trees and species or to reduce the stocking level of a stand of desirable trees. The trees to be retained will be marked by a consultant. Resource concerns include Undesirable plant productivity and health; Wildlife habitat degradation; Wildfire hazard; and Inadequate structure and composition.
Before Practice Situation	A stand of desirable trees is adversely affected by competition either from undesirable species, cull trees, or because the stand is overstocked. The vegetation to be controlled is too large to be mowed or shredded. Therefore other mechanical methods such as using masticators or mulchers is necessary.
After Practice Situation	The released stand of trees contains the composition and quality needed to meet the landowner's objectives and address the resource concerns.
Scenario Feature Measure	Area treated
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$3,260.70	\$326.07
Labor	\$2,215.38	\$221.54
Mobilization	\$693.53	\$69.35
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$6,169.61	\$616.96

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	943	Mechanical cutter, chopper	Masticator, flail shredder, hydro axe, brush cutter, etc. Equipment and power unit costs. Labor not included.	Hour	\$108.69	30	\$3,260.70
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	15	\$1,248.30
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.90	30	\$717.00
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	6	\$250.08
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	2	\$171.40
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	1	\$274.33
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$41.30	6	\$247.80

## Scenario Worksheet

## Practice and Scenario Description:

<b>Information Type</b>	<b>Data</b>
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	5
Scenario Name	Competition Control - Mechanical, Light Equipment
Scenario Description	Using light equipment such as a tractor with brush hog to control vegetation that is competing with desirable trees and species or to reduce the stocking level of a stand of desirable trees. Resource concerns include Undesirable plant productivity and health; Wildlife habitat degradation; Wildfire hazard; and Inadequate structure and composition.
Before Practice Situation	A stand of young, desirable trees is adversely affected by competition either from undesirable species or because the stand is overstocked. The vegetation to be controlled is small enough that it can be mowed or shredded. The work can be done by mowing or shredding strips through the stand, mowing between planted rows, etc.
After Practice Situation	After adjusting the stocking to an acceptable level and/or controlling the competing vegetation, stand growth, condition, and overall quality is improved. In addition, wildlife habitat is improved with the resulting increase of sunlight reaching the forest floor.
Scenario Feature Measure	Area Treated
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$386.38	\$38.64
Labor	\$274.56	\$27.46
Mobilization	\$504.40	\$50.44
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,165.34	\$116.53

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	\$17.43	10	\$174.30
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	8	\$212.08
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.90	8	\$191.20
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	2	\$83.36
Mobilization	1143	Mobilization, Light Equipment Operator	Mobilization of light equipment operators: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.67	2	\$47.34
Mobilization	1138	Mobilization, small equipment	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$187.23	2	\$374.46
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$41.30	2	\$82.60

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	666 - Forest Stand Improvement
Scenario ID	2
Scenario Name	Timber Stand Improvement - Chemical, Single Stem Treatment
Scenario Description	Altering the composition and stocking of a stand of trees by means of individual stem treatment. The trees to be retained are marked by a consultant forester. Resource concerns include Undesirable plant productivity and health; Wildlife habitat degradation; Wildfire hazard; and Inadequate structure and composition.
Before Practice Situation	The existing condition of the stand cannot meet the landowners objectives because the composition consists of unwanted species and the stocking exceeds the recommended level. The species and quality of the trees to be controlled makes a commercial operation unfeasible. Therefore the stand improvement will be carried out with single stem treatment such as injection or basal bark spraying.
After Practice Situation	The composition of the stand can meet the landowners objectives and the growth, condition and quality of the remaining trees is improved.
Scenario Feature Measure	Acres treated
Scenario Unit	Acres
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$126.30	\$12.63
Equipment/Installation	\$717.76	\$71.78
Labor	\$1,710.36	\$171.04
Mobilization	\$578.18	\$57.82
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$3,132.60	\$313.26

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	337	Herbicide, Picloram	A systemic herbicide used for general woody plant control. Product is typically used in these practices 314, 595, 666, and 645. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	\$12.63	10	\$126.30
Equipment/Installation	964	Chemical, spot treatment, single stem application	Ground applied chemical to individual plants or group of plants, e.g., backpack sprayer treatment. Equipment and labor cost included.	Hour	\$55.87	10	\$558.70
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	6	\$159.06
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	12	\$998.64
Labor	230	Skilled Labor	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.54	18	\$711.72
Mobilization	1146	Mobilization, Specialist Labor	Mobilization of Specialist Labor. Includes Agronomists, Foresters, Biologists, etc.	Hour	\$85.70	4	\$342.80
Mobilization	1141	Mobilization, Skilled labor	Mobilization of skilled labor: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.23	6	\$235.38