

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	380 - Windbreak/Shelterbelt Est.
Scenario ID	1
Scenario Name	1 row windbreak, trees, hand planted
Scenario Description	Single 500 foot row of trees established along a property boundary or field border. Trees planted by hand 10 feet apart. This practice is typically applied to crop, pasture or range lands. Resource Concerns to be addressed may include: Soil Erosion (wind); Excess/Insufficient Water (drifted snow, inefficient moisture management); Water Quality Degradation (excess nutrients in surface waters, excessive sediment in surface waters,); Degraded Plant Condition (undesirable plant productivity and health); Inadequate habitat for Fish and Wildlife (food, cover/shelter, continuity); Inefficient Energy Use (facilities, farming/ranching practices and field operations).
Before Practice Situation	A farm or ranch will have limited or no existing trees along the property or field border.
After Practice Situation	Windbreaks established along a property boundary or field border typically will have one row of trees or shrubs. After the practice is established the boundaries should be clearly evident by the row of trees.
Scenario Feature Measure	length of windbreak row(s)
Scenario Unit	Linear Foot
Scenario Typical Size	500

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$32.50	\$0.07
Equipment/Installation	\$29.83	\$0.06
Labor	\$35.76	\$0.07
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$98.09	\$0.20

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1509	Tree, hardwood, seedling or transplant, bare root, 6-18"	Bare root hardwood trees 6-18" tall. Materials only.	Each	\$0.65	50	\$32.50
Equipment/Installation	1590	Hand tools, tree planting	Various hand tools for digging holes and planting trees such as augers, dibble bars, planting shovel, hoe-dad. Equipment only.	Hour	\$9.44	2	\$18.88
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	0.5	\$10.95
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	\$17.88	2	\$35.76

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**Practice and Scenario Description:**

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	380 - Windbreak/Shelterbelt Est.
Scenario ID	7
Scenario Name	3 or more tree rows machine planted windbreak
Scenario Description	Three or more 500 foot rows of trees for wind protection, energy conservation, wildlife habitat, air quality, snow management or to provide a visual screen. The outside rows are conifers the inside row(s) are hardwoods. Trees 12 feet apart with rows 12 feet apart, planted with a tree planting machine. Herbivores are not expected to browse planted seedlings, so tree shelters are not needed. This practice is typically applied to crop, pasture or range lands. Resource Concerns to be addressed include: Soil Erosion (wind); Excess/Insufficient Water (drifted snow, inefficient moisture management); Water Quality Degradation (excess nutrients in surface waters, pesticides transported to surface waters, excessive sediment in surface waters,); Degraded Plant Condition (undesirable plant productivity and health); Inadequate habitat for Fish and Wildlife (food, cover/shelter, continuity); Livestock Production Limitation (inadequate shelter); Air Quality Impacts (emission of particulate matter, objectionable odors); Inefficient Energy Use (facilities, farming/ranching practices and field operations).
Before Practice Situation	Agricultural field, livestock paddock, feedlot or farmstead needing protection from wind, additional wildlife food and cover, odor mitigation, visual screening or management of snow deposition
After Practice Situation	Wind velocity suitably reduced to reduce soil erosion, energy loss or to manage snow deposition. Additional wildlife food and cover, mixing of odor plumes and visual screening.
Scenario Feature Measure	length of windbreak row(s)
Scenario Unit	Linear Foot
Scenario Typical Size	500

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$81.25	\$0.16
Equipment/Installation	\$95.50	\$0.19
Labor	\$143.04	\$0.29
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$319.79	\$0.64

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1509	Tree, hardwood, seedling or transplant, bare root, 6-18"	Bare root hardwood trees 6-18" tall. Materials only.	Each	\$0.65	125	\$81.25
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	8	\$35.04
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	1	\$21.90
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	2	\$38.56
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	\$17.88	8	\$143.04

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	4
Scenario Name	Establish Introduced Grass
Scenario Description	Establishment of introduced grasses into an existing stand of trees that is already at an adequate density .
Before Practice Situation	10-acre pine plantation woodlot that has a basal area of 50 sq. ft. per acre. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage.
After Practice Situation	The soil is prepared for planting using chemical and mechanical means, then a mix of cool-season grasses and legumes will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,053.40	\$105.34
Equipment/Installation	\$456.56	\$45.66
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,509.96	\$151.00

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.74	300	\$222.00
Materials	69	Nitrogen (N), Ammonium Nitrate	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.73	400	\$292.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	300	\$159.00
Materials	87	Fescue, Tall (Festuca arundinacea)	Introduced Perennial Grasses and shipping.	Pound	\$1.80	150	\$270.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$6.36	10	\$63.60
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
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	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.89	10	\$48.90
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow, Equipment and power unit costs. Labor is included.	Acre	\$14.46	10	\$144.60

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	3
Scenario Name	Establish Native Grass
Scenario Description	Establishment of native grasses into an existing stand of trees that is already at an adequate density .
Before Practice Situation	10-acre pine plantation woodlot that has a basal area of 50 sq. ft. per acre. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage.
After Practice Situation	The soil is prepared for planting using chemical and mechanical means, then a mix of native warm-season grasses will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,040.15	\$104.02
Equipment/Installation	\$456.56	\$45.66
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,496.71	\$149.67

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.74	300	\$222.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	\$9.62	6	\$57.72
Materials	81	Side Oats Grama (Bouteloua curtipendula)	Native Grasses and shipping.	Pound	\$14.86	4.5	\$66.87
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	6.8	\$104.92
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	11.25	\$142.09
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	15	\$177.15
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	300	\$159.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$6.36	10	\$63.60
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
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	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.89	10	\$48.90
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow, Equipment and power unit costs. Labor is included.	Acre	\$14.46	10	\$144.60

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	8
Scenario Name	Hardwood trees - Pasture
Scenario Description	Silvopasture is a practice to incorporate grazing and growing trees on the same acreage. This management technique provides the landowner with some diversity in their operation. The resource concerns being address include soil erosion - sheet and rill, domestic animal - stress and mortality, domestic animals - inadequate forages.
Before Practice Situation	Silvopasture will be installed in pastures or old field intended to be used for grazing. The current situation is no tree cover as the pastures do not have a significant tree component. Domestic animals do not have any place to get out of the direct sunlight.
After Practice Situation	The practice is established on pastures averaging 100 acres in size. Once completed, the pasture will have a series of trees established in an organized design alternating between trees and open areas. An alternate design is to plant trees at wide spacings without having them in rows. The shade provided by the trees helps conserve water, improve forages and reduces soil erosion.
Scenario Feature Measure	acres
Scenario Unit	Acre
Scenario Typical Size	100

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$16,425.00	\$164.25
Equipment/Installation	\$646.00	\$6.46
Labor	\$606.24	\$6.06
Mobilization	\$248.38	\$2.48
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$17,925.62	\$179.26

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1531	Tree, hardwood, seedling or transplant, potted, 1 gal.	Potted hardwood tree, 1 gal. Materials only.	Each	\$6.68	500	\$3,340.00
Materials	1557	Tree shelter, wire mesh	5 feet tall, Woven Wire mesh, 6"x6" opening or smaller, 10 gauge wire (minimum) , cage placed around seedling for animal protection. Materials only.	Each	\$2.32	2500	\$5,800.00
Materials	1511	Tree, hardwood, seedling or transplant, bare root, 36-60"	Bare root hardwood trees 3 to 5 foot tall. Materials only.	Each	\$1.61	2500	\$4,025.00
Materials	1570	Tree shelter, solid tube type, 5" x 30"	5" x 30" tree tube for protection from animal damage. Materials only.	Each	\$4.60	500	\$2,300.00
Materials	1580	Stakes, wood, 3/4" x 3/4" x 24"	3/4" x 3/4" x 24" wood stakes to fasten items in place. Materials only.	Each	\$0.32	3000	\$960.00
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	16	\$308.48
Equipment/Installation	934	Auger, Post driver attachment	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$6.18	16	\$98.88
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	4	\$87.60
Equipment/Installation	1590	Hand tools, tree planting	Various hand tools for digging holes and planting trees such as augers, dibble bars, planting shovel, hoe-dad. Equipment only.	Hour	\$9.44	16	\$151.04
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$20.01	16	\$320.16
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	\$17.88	16	\$286.08
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	\$86.90	2	\$173.80
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	\$19.83	2	\$39.66
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$17.46	2	\$34.92

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	7
Scenario Name	Establish Trees
Scenario Description	Establishment of trees into an existing pasture that contains adequate native or introduced forage.
Before Practice Situation	10-acre pasture with suitable forage for livestock. There is very little protection from the elements (sun, wind, etc.) available to the livestock. Additionally, there are no long-term wood products being produced. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Livestock Production Limitation - Inadequate Livestock Shelter.
After Practice Situation	The site will be prepared using Tree/Shrub Site Preparation (490), if needed, and then 200 pine trees per acre will be planted, providing shade and wind protection to livestock and wildlife, and, in time, producing a viable wood products crop. Per the conservation practice standard, livestock grazing will be deferred until the trees reach adequate height to resist damage, or use exclusion measures are established. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$120.00	\$12.00
Equipment/Installation	\$189.28	\$18.93
Labor	\$303.12	\$30.31
Mobilization	\$248.38	\$24.84
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$860.78	\$86.08

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1513	Tree, conifer, seedling, bare root, 1-1	Bare root conifer trees, 1-1 (2 years old). Materials only.	Each	\$0.06	2000	\$120.00
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	8	\$154.24
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	8	\$35.04
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$20.01	8	\$160.08
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	\$17.88	8	\$143.04
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	\$86.90	2	\$173.80
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	\$19.83	2	\$39.66
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$17.46	2	\$34.92

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	6
Scenario Name	Establish Trees and Introduced Grass
Scenario Description	Establishment of trees and introduced grasses and legumes into a field that contains neither suitable forage nor suitable tree cover for a silvopasture system.
Before Practice Situation	10-acre old field without suitable forage for livestock nor tree cover. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The site will be prepared using chemical and mechanical means, a mix of cool-season grasses and legumes will be established, and then 200 pine trees per acre will be planted, providing forage to livestock and wildlife, and, in time, producing a viable wood products crop. Per the conservation practice standard, livestock grazing will be deferred until the trees reach adequate height to resist damage, or use exclusion measures are established. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,036.40	\$103.64
Equipment/Installation	\$551.20	\$55.12
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,587.60	\$158.76

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.74	300	\$222.00
Materials	69	Nitrogen (N), Ammonium Nitrate	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.73	400	\$292.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Materials	87	Fescue, Tall (Festuca arundinacea)	Introduced Perennial Grasses and shipping.	Pound	\$1.80	15	\$27.00
Materials	1513	Tree, conifer, seedling, bare root, 1-1	Bare root conifer trees, 1-1 (2 years old). Materials only.	Each	\$0.06	2000	\$120.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. Labor included.	Acre	\$6.36	10	\$63.60
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	4	\$77.12
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	4	\$17.52
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	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.89	10	\$48.90
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow, Equipment and power unit costs. Labor is included.	Acre	\$14.46	10	\$144.60

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	5
Scenario Name	Establish Trees and native Grass
Scenario Description	Establishment of trees and native grasses into a field that contains neither suitable forage nor suitable tree cover for a silvopasture system.
Before Practice Situation	10-acre old field without suitable forage for livestock nor tree cover. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The site will be prepared using chemical and mechanical means, a mix of native warm-season grasses will be established, and then 200 pine trees per acre will be planted, providing forage to livestock and wildlife, and, in time, producing a viable wood products crop. Per the conservation practice standard, livestock grazing will be deferred until the trees reach adequate height to resist damage, or use exclusion measures are established. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$2,210.73	\$221.07
Equipment/Installation	\$551.20	\$55.12
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,761.93	\$276.19

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.74	300	\$222.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	\$9.62	6	\$57.72
Materials	81	Side Oats Grama (Bouteloua curtipendula)	Native Grasses and shipping.	Pound	\$14.86	4.5	\$66.87
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	6.7	\$103.38
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	1.125	\$14.21
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	15	\$177.15
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	300	\$159.00
Materials	1509	Tree, hardwood, seedling or transplant, bare root, 6-18"	Bare root hardwood trees 6-18" tall. Materials only.	Each	\$0.65	2000	\$1,300.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. Labor included.	Acre	\$6.36	10	\$63.60
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	4	\$77.12
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	4	\$17.52
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	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.89	10	\$48.90
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow, Equipment and power unit costs. Labor is included.	Acre	\$14.46	10	\$144.60

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	2
Scenario Name	Noncommercial thinning Introduced Grass
Scenario Description	Non-commercial thinning of an existing stand of trees followed by establishment of introduced grasses.
Before Practice Situation	10-acre pine plantation that is overstocked, with a basal area of 100 sq. ft. per acre. There is very little available forage for livestock, due to the dense shade of the tree canopy. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Wildfire Hazard, Excessive Biomass Accumulation; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The stand is thinned non-commercially to a basal area of 50 sq. ft. per acre, which will allow adequate sunlight to the forest floor for grass production, yet still provide shade and some protection from the elements for livestock and wildlife. Debris is removed, all tree cutting will leave the shortest possible stump height. The soil is prepared for planting using chemical and mechanical means, then a mix of cool-season grasses and legumes will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,103.60	\$110.36
Equipment/Installation	\$3,210.96	\$321.10
Labor	\$1,072.80	\$107.28
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$5,387.36	\$538.74

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.74	300	\$222.00
Materials	69	Nitrogen (N), Ammonium Nitrate	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.73	400	\$292.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
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
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	300	\$159.00
Materials	87	Fescue, Tall (Festuca arundinacea)	Introduced Perennial Grasses and shipping.	Pound	\$1.80	150	\$270.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$6.36	10	\$63.60
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	40	Clearing and Grubbing	Clearing and Grubbing, includes materials, equipment and labor	Acre	\$248.32	10	\$2,483.20
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$4.52	60	\$271.20
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	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.89	10	\$48.90
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow, Equipment and power unit costs. Labor is included.	Acre	\$14.46	10	\$144.60
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	\$17.88	60	\$1,072.80

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	1
Scenario Name	Non Comercial Thinning Est Native Grass
Scenario Description	Non-commercial thinning of an existing stand of trees followed by establishment of native grasses.
Before Practice Situation	10-acre pine plantation that is overstocked, with a basal area of 100 sq. ft. per acre. There is very little available forage for livestock, due to the dense shade of the tree canopy. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Wildfire Hazard, Excessive Biomass Accumulation; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The stand is thinned non-commercially to a basal area of 50 sq. ft. per acre, which will allow adequate sunlight to the forest floor for grass production, yet still provide shade and some protection from the elements for livestock and wildlife. Debris is removed, all tree cutting will leave the shortest possible stump height. The soil is prepared for planting using chemical and mechanical means, then a mix of native warm-season grasses will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$960.93	\$96.09
Equipment/Installation	\$3,210.96	\$321.10
Labor	\$1,072.80	\$107.28
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$5,244.69	\$524.47

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.74	300	\$222.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
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
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	\$9.62	6	\$57.72
Materials	81	Side Oats Grama (Bouteloua curtipendula)	Native Grasses and shipping.	Pound	\$14.86	4.5	\$66.87
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	6.7	\$103.38
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	1.125	\$14.21
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	15	\$177.15
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	300	\$159.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$6.36	10	\$63.60
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	40	Clearing and Grubbing	Clearing and Grubbing, includes materials, equipment and labor	Acre	\$248.32	10	\$2,483.20
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$4.52	60	\$271.20
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	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.89	10	\$48.90
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow, Equipment and power unit costs. Labor is included.	Acre	\$14.46	10	\$144.60
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	\$17.88	60	\$1,072.80

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Range/Pasture Grazing
Practice Code/Name	382 - Fence
Scenario ID	1
Scenario Name	Barbed/Smooth Wire
Scenario Description	Multi-strand, Barbed or Smooth Wire - Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Materials and construction will be planned and applied in accordance with (382) Fence standard and specifications.
Before Practice Situation	On grazing lands health and vigor are negatively impacted by poor grazing distribution, timing of grazing and inadequate rest and recovery periods. Water quality is impacted by increased erosion and runoff, cattle access to water bodies is uncontrolled. Reduced vegetative cover increases the opportunity for encroachment of noxious and invasive weeds.
After Practice Situation	Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Fence includes posts, wire, fasteners, gates, etc... Four strand wire is minimally required. Fence will be installed with wildlife friendly considerations.
Scenario Feature Measure	Length of Fence
Scenario Unit	Linear Foot
Scenario Typical Size	2640

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,934.40	\$0.73
Equipment/Installation	\$725.72	\$0.27
Labor	\$1,430.40	\$0.54
Mobilization	\$86.90	\$0.03
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,177.42	\$1.58

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	15	Post, Steel T, 1.33 lbs, 6'	Steel Post, Studded 6' - 1.33 lb	Each	\$7.59	176	\$1,335.84
Materials	9	Post, Wood, CCA treated, 3-4" x 7'	Wood Post, Line 3-4" X 7', CCA Treated	Each	\$9.04	10	\$90.40
Materials	1	Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	Galvanized 12.5 gauge, 1,320' roll	Each	\$63.52	8	\$508.16
Equipment/Installation	934	Auger, Post driver attachment	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$6.18	7	\$43.26
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	7	\$134.96
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	25	\$547.50
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	\$17.88	80	\$1,430.40
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	\$86.90	1	\$86.90

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Range/Pasture Grazing
Practice Code/Name	382 - Fence
Scenario ID	2
Scenario Name	Wire Difficult
Scenario Description	Barbed, Smooth ,or Woven Wire Difficult Installation - Installation of fence in difficult situations (i.e. rocky, steep or shallow soils) will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Materials and construction will be planned and applied in accordance with (382) Fence standard and specifications.
Before Practice Situation	On grazing lands health and vigor are negatively impacted by poor grazing distribution, timing of grazing and inadequate rest and recovery periods. Water quality is impacted by increased erosion and runoff, cattle access to water bodies is uncontrolled. Reduced vegetative cover increases the opportunity for encroachment of noxious and invasive weeds. Fence installation conditions are for difficult sites such as poor access, steep slopes, rocky sites, dense brush, wet conditions etc.
After Practice Situation	Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Fence includes posts, wire, fasteners, gates, brace posts, etc... Fence will be installed with wildlife friendly considerations.
Scenario Feature Measure	Length of Fence
Scenario Unit	Linear Foot
Scenario Typical Size	2640

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$2,086.54	\$0.79
Equipment/Installation	\$1,084.20	\$0.41
Labor	\$1,788.00	\$0.68
Mobilization	\$86.90	\$0.03
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$5,045.64	\$1.91

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	15	Post, Steel T, 1.33 lbs, 6'	Steel Post, Studded 6' - 1.33 lb	Each	\$7.59	176	\$1,335.84
Materials	9	Post, Wood, CCA treated, 3-4" x 7'	Wood Post, Line 3-4" X 7', CCA Treated	Each	\$9.04	20	\$180.80
Materials	12	Post, Wood, CCA treated, 6" x 8'	Wood Post, End 6" X 8', CCA Treated	Each	\$20.58	3	\$61.74
Materials	1	Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	Galvanized 12.5 gauge, 1,320' roll	Each	\$63.52	8	\$508.16
Equipment/Installation	934	Auger, Post driver attachment	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$6.18	8	\$49.44
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$4.52	1	\$4.52
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	8	\$154.24
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	40	\$876.00
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	\$17.88	100	\$1,788.00
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	\$86.90	1	\$86.90

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Range/Pasture Grazing
Practice Code/Name	382 - Fence
Scenario ID	3
Scenario Name	Electric
Scenario Description	Electric - Installation of fence will allow for implementation of a grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Materials and construction will be planned and applied in accordance with (382) Fence standard and specifications.
Before Practice Situation	On grazinglands health and vigor are negatively impacted by poor grazing distribution, timing of grazing and inadequate rest and recovery periods. Water quality is impacted by increased erosion and runoff, cattle access to water bodies is uncontrolled. Reduced vegetative cover increases the opportunity for encroachment of noxious and invasive weeds.
After Practice Situation	Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Fence includes posts, wire, fasteners, gates, fence charger, etc... Two to three strand wire is commonly installed. Fence will be installed with wildlife friendly considerations.
Scenario Feature Measure	Length of Fence
Scenario Unit	Linear Foot
Scenario Typical Size	1320

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$868.20	\$0.66
Equipment/Installation	\$430.34	\$0.33
Labor	\$894.00	\$0.68
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,192.54	\$1.66

**Cost Details:**

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	29	Electric, Energizer, 6 joule	Electric, Energizer, 6 joule for electric fence	Each	\$331.70	1	\$331.70
Materials	22	Electric, Lightening Diverter	Electric, Lightening diverter for electric fence	Each	\$12.01	1	\$12.01
Materials	34	Fence, Wire Assembly, High Tensile, Electric, 3 Strand	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves	Foot	\$0.12	1320	\$158.40
Materials	18	Post, Fiberglass, 7/8" X 6'	Fiberglass line post, 7/8" diameter X 6' length	Each	\$9.24	5	\$46.20
Materials	15	Post, Steel T, 1.33 lbs, 6'	Steel Post, Studded 6' - 1.33 lb	Each	\$7.59	35	\$265.65
Materials	9	Post, Wood, CCA treated, 3-4" x 7'	Wood Post, Line 3-4" X 7', CCA Treated	Each	\$9.04	6	\$54.24
Equipment/Installation	934	Auger, Post driver attachment	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$6.18	4	\$24.72
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	4	\$77.12
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	15	\$328.50
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	\$17.88	50	\$894.00

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Southern Plains
State	Oklahoma
Discipline Group	Range/Pasture Grazing
Practice Code/Name	382 - Fence
Scenario ID	4
Scenario Name	Wildlife Friendly Fence
Scenario Description	Installation of new fence with unique and additional materials designed facilitate the movement of wildlife. Materials and construction will be planned and applied in accordance with (382) Fence standard and specifications.
Before Practice Situation	Degraded plant condition, undesirable plant productivity, and plant health, due to improper grazing distribution.
After Practice Situation	Fences are installed to distribute grazing in a manner to improve plant condition, plant productivity, and plant health. This scenario is for constructing and marking all new barbed and net wire fences where wildlife is a resource concern. A four-strand barbed or net wire cross fence, built and marked on grazing lands with no steep or rocky soils requiring more intensive construction methods. Installation will result in or improve the rotational grazing system for cattle, sheep, goats and/or horses. Refer to Fence (Code 382) for standards and specifications. Marking new fences to increase the visibility may reduce collisions by prairie-chickens. Fences will be built where they are not a barrier to pronghorn or other wild ungulant movement. This type of fence is typically used to facilitate a prescribed grazing plan by separating forage types, areas of different production or carrying capacity, sensitive areas or areas requiring different levels of management. When used for cross fencing, size of paddocks size of paddocks are typically >40 acres.
Scenario Feature Measure	Length of fence
Scenario Unit	Linear Foot
Scenario Typical Size	2640

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$2,066.40	\$0.78
Equipment/Installation	\$751.18	\$0.28
Labor	\$1,788.00	\$0.68
Mobilization	\$86.90	\$0.03
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,692.48	\$1.78

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	15	Post, Steel T, 1.33 lbs, 6'	Steel Post, Studded 6' - 1.33 lb	Each	\$7.59	176	\$1,335.84
Materials	9	Post, Wood, CCA treated, 3-4" x 7'	Wood Post, Line 3-4" X 7', CCA Treated	Each	\$9.04	10	\$90.40
Materials	241	Vinyl Undersill Strips	Marking material is the "undersill" strips of vinyl siding made by Georgia Pacific	Foot	\$0.05	2640	\$132.00
Materials	1	Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	Galvanized 12.5 gauge, 1,320' roll	Each	\$63.52	8	\$508.16
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	8	\$154.24
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$21.90	25	\$547.50
Equipment/Installation	934	Auger, Post driver attachment	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$6.18	8	\$49.44
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	\$17.88	100	\$1,788.00
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	\$86.90	1	\$86.90