

Practice: 382 - Fence

Scenario: #2 - Permanent Barbed Wire Multi Strand

Scenario Description:

Scenario is for the establishment of permanent multi strand barbed wire fence for livestock.

Before 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 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.

Associated Practices: Prescribed Grazing, Pipeline,

Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Length of Fence

Scenario Unit: Feet

Scenario Typical Size: 1,320

Scenario Cost: \$2,938.98

Scenario Cost/Unit: \$2.23

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	12	\$451.44
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.46	12	\$101.52
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.73	12	\$284.76
Labor						
General Labor	231	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	\$22.43	24	\$538.32
Materials						
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$201.61	1	\$201.61
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$10.89	4	\$43.56
Fence, Wire Assembly, Barbed Wire	30	Brace pins, battens, clips, staples. Includes materials and shipping only.	Foot	\$0.16	1320	\$211.20
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.05	68	\$411.40
Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	1	Galvanized 12.5 gauge, 1,320' roll. Includes materials and shipping only.	Each	\$68.83	5	\$344.15
Mobilization						
Mobilization, small equipment	1138	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	\$175.51	2	\$351.02

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Scenario: #3 - Permanent High Tensile Electric 2-3 Strand

Scenario Description:

Scenario is for the installation of a permanent high tensile electric fence of either 2 or 3 strands. 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. Constructed using fencing materials rather than a pre-manufactured gate.

Before 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, livestock access to water bodies is uncontrolled. Reduced vegetative cover increases opportunity for encroachment of noxious and invasive weeds.

After Situation:

Installation of fence will allow for implementation of a rotational grazing plan that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. This scenario consists of installing a permanent high tensile electric fence with 2-3 wires with wooden post of 50' centers, battens between the post, single H brace assemblies, energizer, and all apputenances. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Length of Fence

Scenario Unit: Feet

Scenario Typical Size: 1,320

Scenario Cost: \$2,086.09

Scenario Cost/Unit: \$1.58

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.46	6	\$50.76
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	6	\$225.72
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.73	6	\$142.38
Labor						
General Labor	231	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	\$22.43	12	\$269.16
Materials						
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$110.29	2	\$220.58
Electric, Energizer, 6 joule	29	Electric, Energizer, 6 joule for electric fence. Includes materials and shipping only.	Each	\$313.45	1	\$313.45
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$10.89	4	\$43.56
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$201.61	1	\$201.61
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.05	29	\$175.45
Fence, Wire Assembly, High Tensile, Electric, 2 Strand	33	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.07	1320	\$92.40
Mobilization						
Mobilization, small equipment	1138	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	\$175.51	2	\$351.02

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Scenario: #4 - Permanent High Tensile Electric Single Strand

Scenario Description:

Scenario is for the installation of a permanent high tensile electric single strand fence. 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.

Before 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 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. Fence will be installed with wildlife friendly considerations. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Length of Fence

Scenario Unit: Feet

Scenario Typical Size: 1,320

Scenario Cost: \$1,333.93

Scenario Cost/Unit: \$1.01

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.46	3	\$25.38
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.73	3	\$71.19
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	3	\$112.86
Labor						
General Labor	231	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	\$22.43	6	\$134.58
Materials						
Electric, Energizer, 6 joule	29	Electric, Energizer, 6 joule for electric fence. Includes materials and shipping only.	Each	\$313.45	1	\$313.45
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$110.29	1	\$110.29
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.05	24	\$145.20
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$10.89	4	\$43.56
Fence, Wire Assembly, High Tensile, Electric, 1 Strand	32	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.02	1320	\$26.40
Mobilization						
Mobilization, small equipment	1138	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	\$175.51	2	\$351.02

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Scenario: #6 - Permanent High Tensile, Minimum 4 Strand, Posts 20ft Centers, Single H

Scenario Description:

Establishment of permanent electric or non-electric high tensile fence for livestock. Fence is designed using minimum of 4 strands with posts on 20 foot centers using single H bracing.

Before Situation:

This practice will be installed on grazing land. The resource concerns to be addressed by this practice are poor grazing distribution, inadequate water supply, and degraded site conditions leading to poor animal health.

After Situation:

Typical size for this scenario is 1320 feet. This scenario consists of installing a permanent high tensile fence with with a minimum of 4 wires with wooden posts on 20' centers and battens between the posts, single H brace assemblies and all appurtenances. Cost represents typical situations for conventional, organic, and transitioning to organic producers. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$2,200.36

Scenario Cost/Unit: \$1.67

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
	1142				4	
Equipment/Installation						
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.73	8	\$189.84
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	8	\$300.96
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.46	8	\$67.68
Labor						
General Labor	231	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	\$22.43	16	\$358.88
Materials						
Fence, Wire Assembly, High Tensile, Electric, 2 Strand	33	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.07	1320	\$92.40
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$10.89	4	\$43.56
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$201.61	1	\$201.61
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$110.29	2	\$220.58
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.05	68	\$411.40
Electric, Energizer, 6 joule	29	Electric, Energizer, 6 joule for electric fence. Includes materials and shipping only.	Each	\$313.45	1	\$313.45

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Scenario: #7 - Permanent Woven Wire

Scenario Description:

Establishment of woven wire fence for livestock.

Before Situation:

This practice will be installed on grazing land. The resource concerns to be addressed by this practice are poor grazing distribution, inadequate water supply, and degraded site conditions leading to poor animal health.

After Situation:

Typical size for this scenario is 1320 feet. This scenario consists of installing a permanent woven wire fence with wooden posts of 20' centers and single H brace assemblies. Also includes one strand barbed top wire, and all appurtenances. Cost represents typical situations for conventional, organic, and transitioning to organic producers. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$3,270.37

Scenario Cost/Unit: \$2.48

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.46	12	\$101.52
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	8	\$300.96
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.73	12	\$284.76
Labor						
General Labor	231	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	\$22.43	24	\$538.32
Materials						
Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	1	Galvanized 12.5 gauge, 1,320' roll. Includes materials and shipping only.	Each	\$68.83	1	\$68.83
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$10.89	6	\$65.34
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$201.61	1	\$201.61
Fence, Wire Assembly, Woven Wire	35	Brace pins, twist sticks, staples. Includes materials and shipping only.	Foot	\$0.12	1320	\$158.40
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.05	65	\$393.25
Wire, Woven, Galvanized, 12.5 Gauge, 48"	4	Galvanized 12.5 gauge, 48" - 330' roll. Includes materials and shipping only.	Each	\$201.59	4	\$806.36
Mobilization						
Mobilization, small equipment	1138	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	\$175.51	2	\$351.02

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Scenario: #8 - Temporary/Portable Fence

Scenario Description:

Establishment of temporary or portable fence for livestock to facilitate a more intensive grazing system such as stockpiling or stripgrazing.

Before Situation:

This practice will be installed on grazing land. The resource concerns to be addressed by this practice are poor grazing distribution, inadequate water supply, and degraded site conditions leading to poor animal health.

After Situation:

Consists of installing a single strand polywire/polytape fence with step in/fiberglass posts on 50' centers, solar energizer, and all appurtenances. Cost represents typical situations for conventional, organic, and transitioning to organic producers. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$624.21

Scenario Cost/Unit: \$0.47

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	1	\$37.62
Labor						
General Labor	231	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	\$22.43	1	\$22.43
Materials						
Electric, Energizer, Solar	27	Electric, Energizer, Solar for electric fence. Includes materials and shipping only.	Each	\$308.82	1	\$308.82
Post, Fiberglass, 11/16" X 6'	19	Fiberglass line post, 11/16" diameter X 6' length. Includes materials and shipping only.	Each	\$6.28	26	\$163.28
Wire, Polywire	8	Wire, Polywire for electric fence - 1,300 roll. Includes materials and shipping only.	Each	\$46.03	2	\$92.06

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Scenario: #10 - Temporary_Portable for Small Livestock

Scenario Description:

Establishment of temporary or portable fence for small livestock to facilitate a more intensive grazing system such as stockpiling or stripgrazing.

Before Situation:

This practice will be installed on grazing land. The resource concerns to be addressed by this practice are poor grazing distribution, inadequate water supply, and degraded site conditions leading to poor animal health.

After Situation:

Consists of installing a prefabricated fence that has 10 horizontal twines; is 42 in. tall installed, and has plastic vertical struts every 12", solar energizer, and all appurtenances. Cost represents typical situations for conventional, organic, and transitioning to organic producers.

Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Length of fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$1,847.27

Scenario Cost/Unit: \$1.40

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.62	1	\$37.62
Labor						
General Labor	231	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	\$22.43	1	\$22.43
Materials						
Electric, Energizer, Solar	27	Electric, Energizer, Solar for electric fence. Includes materials and shipping only.	Each	\$308.82	1	\$308.82
Wire, Electric Netting, 42"	2382	Electric netting, 42" tall, 10 horizontal strands, vertical struts every 12 inches, single spike. Material only.	Foot	\$1.12	1320	\$1,478.40