

Practice: 386 - Field Border

Scenario: #1 - Introduced Mix, Field Crop Operation

Scenario Description: A strip of permanent vegetation established at the edge or around the perimeter of a field. Mix includes perennial introduced grasses and legumes. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes seedbed prep and planting of a introduced grass and legume mix or a single species native grass. The area of the field border is taken out of production. Associated Practices: Herbaceous Weed Control (315), Conservation Cropping Rotation (328), Critical Area Planting (342), Nutrient Management (590), Integrated Pest Management (595), Prescribed Grazing (528).

Before Situation: Before practice conditions may vary widely. Fields may have erosion issues from wind or water, a field border may be needed to manage pest populations, protect soil and water quality, provide wildlife food and cover, provide pollinator habitat, or a field border may be used to increase carbon storage and improve air quality. Water quality, soil erosion and/or wildlife food and cover may all be primary resource concerns.

After Situation: This practice when applied around a field will support and connect other buffer practices within and between fields. Introduced grasses and legumes OR a native grass species will be established around the field edges to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice.

Scenario Feature Measure: number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$528.92

Scenario Cost/Unit: \$528.92

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

Materials

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	1	\$49.65
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	1	\$15.93
Herbicide, Surfactant	1095	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. Includes materials and shipping only.	Acre	\$1.30	1	\$1.30
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.60	40	\$24.09
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	50	\$39.06
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.44	50	\$21.78

Equipment Installation

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.80	1	\$6.80
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$7.61	1	\$7.61
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$12.34	1	\$12.34

Foregone Income

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$346.36	0.5	\$173.18
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$356.12	0.25	\$89.03

FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$258.00	0.25	\$64.50
-------------------	------	-------------------------------	------	----------	------	---------

Practice: 386 - Field Border

Scenario: #2 - Introduced or Native Seeding, Fruit/Vegetable Operation

Scenario Description: A strip of permanent vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production. Associated Practices: Herbaceous Weed Control (315), Conservation Cropping Rotation (328), Critical Area Planting (342), Nutrient Management (590), Integrated Pest Management (595), Prescribed Grazing (528).

Before Situation: Before practice conditions may vary widely. Fields may have erosion issues from wind or water, a field border may be needed to manage pest populations, protect soil and water quality, provide wildlife food and cover, provide pollinator habitat, or a field border may be used to increase carbon storage and improve air quality. Water quality, soil erosion and/or wildlife food and cover may all be primary resource concerns.

After Situation: This practice when applied around a field will support and connect other buffer practices within and between fields. Introduced grasses and legumes will be established around the field edges to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Introduced species of grasses, legumes, forbs or shrubs shall be selected that are adapted to site, will not function as a host for diseases of a field crop and have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$1,318.65

Scenario Cost/Unit: \$1,318.65

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

Materials

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	1	\$49.65
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	1	\$15.93
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.60	50	\$30.12
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	50	\$39.06

Equipment Installation

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.80	1	\$6.80
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$7.61	1	\$7.61
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$12.34	1	\$12.34

Foregone Income

FI, Vegetables	2033	Vegetables is Primary Crop	Acre	\$1,133.49	1	\$1,133.49
----------------	------	----------------------------	------	------------	---	------------

Practice: 386 - Field Border

Scenario: #3 - Native Grasses with Forbs, Field Crop Operation

Scenario Description: A strip of permanent vegetation established at the edge or around the perimeter of a field. Vegetation typically consists of 70 to 90 percent native perennial grasses and 10 to 30 percent commonly available native forbs and legumes. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes seedbed prep and planting of native grasses and forbs. The area of the field border is taken out of production. Associated Practices: Herbaceous Weed Control (315), Conservation Cropping Rotation (328), Critical Area Planting (342), Nutrient Management (590), Integrated Pest Management (595), Prescribed Grazing (528), Upland Wildlife Habitat Management (645), Early Successional Wildlife Habitat Development and Management (647).

Before Situation: Before practice conditions may vary widely. Fields may have erosion issues from wind or water, a field border may be needed to manage pest populations, protect soil and water quality, provide wildlife food and cover, provide pollinator habitat, or a field border may be used to increase carbon storage and improve air quality. Water quality, soil erosion and/or wildlife food and cover may all be primary resource concerns.

After Situation: This practice when applied around a field will support and connect other buffer practices within and between fields. The mix of native grasses and forbs provides nesting, cover, and foraging habitat for early successional species and pollinators. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$646.72

Scenario Cost/Unit: \$646.72

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

Materials

Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	1	\$15.93
Native Grass and Forb Mix, for Wildlife (including pollinators) or Ecosystem Restoration	2335	Native grass and forb/legume mix, including specialized species. Includes material and shipping only.	Acre	\$261.29	1	\$261.29

Equipment Installation

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.80	1	\$6.80
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$12.34	1	\$12.34

Foregone Income

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$346.36	0.5	\$173.18
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$356.12	0.25	\$89.03
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$258.00	0.25	\$64.50

Practice: 386 - Field Border

Scenario: #4 - Trees

Scenario Description: A strip of permanent vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production. Associated Practices: Herbaceous Weed Control (315), Conservation Cropping Rotation (328), Critical Area Planting (342), Nutrient Management (590), Integrated Pest Management (595), Prescribed Grazing (528), Tree and Shrub Planting (612).

Before Situation: Before practice conditions may vary widely. Fields may have erosion issues from wind or water, a field border may be needed to manage pest populations, protect soil and water quality, provide wildlife food and cover, provide pollinator habitat, or a field border may be used to increase carbon storage and improve air quality. Water quality, soil erosion and/or wildlife food and cover may all be primary resource concerns.

After Situation: This practice when applied around a field will support and connect other buffer practices within and between fields. Herbaceous plantings will be established to meet Field Border specifications and in addition trees will be established around the field edges to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Tree species selected shall be adapted to site, not function as a host for diseases of a field crop and have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area.

Scenario Feature Measure: Number of Acres

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$612.19

Scenario Cost/Unit: \$612.19

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

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	\$22.19	1	\$22.19
---------------	-----	--	------	---------	---	---------

Materials

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	1	\$49.65
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	1	\$15.93
Tree, conifer, seedling, bare root, 1-0	1512	Bare root conifer trees, 1-0 (1 year old). Includes materials and shipping only.	Each	\$0.36	400	\$142.88

Equipment Installation

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.80	1	\$6.80
Hand tools, tree planting	1590	Various hand tools for digging holes and planting trees such as augers, dibble bars, planting shovel, hoe-dad. Equipment only. Labor not included.	Hour	\$12.04	1	\$12.04
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$12.34	1	\$12.34

Foregone Income

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$346.36	0.5	\$173.18
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$356.12	0.25	\$89.03
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$258.00	0.25	\$64.50

Practice: 386 - Field Border

Scenario: #5 - Organic Seeding, Vegetable/Fruit Operaton

Scenario Description: A strip of permanent vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production. Associated Practices: Herbaceous Weed Control (315), Conservation Cropping Rotation (328), Critical Area Planting (342), Nutriet Management (590), Integrated Pest Management (595), Prescribed Grazing (528).

Before Situation: Before practice conditions may vary widely. Fields may have erosion issues from wind or water, a field border may be needed to manage pest populations, protect soil and water quality, provide wildlife food and cover, provide pollinator habitat, or a field border may be used to increase carbon storage and improve air quality. Water quality, soil erosion and/or wildlife food and cover may all be primary resource concerns.

After Situation: This practice when applied around a field will support and connect other buffer practices while creating a buffer between organic systems and conventional cropping systems. Organic grasses and legumes will be established around the field edges to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species selected shall be adapted to site, not function as a host for diseases of a field crop and have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area.

Scenario Feature Measure: Number of Acres

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$1,544.86

Scenario Cost/Unit: \$1,544.86

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

Materials

Certified Organic, Three Species Mix, Cool Season, Perennial Grasses and Legumes	2340	Certified organic cool season perennial grass and legume mix. Includes material and shipping only.	Acre	\$69.62	1	\$69.62
Nitrogen, Organic	266	ORGANIC Nitrogen	Pound	\$0.25	50	\$12.53
Potassium, Organic	268	ORGANIC Potassium	Pound	\$0.25	50	\$12.49
Rock Phosphate	262	Approved for Organic Systems - Rock Phosphate	Pound	\$0.38	50	\$18.95

Equipment Installation

Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$7.61	1	\$7.61
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Site Preparation, Mechanical	944	Aerator, rolling drum chopper, etc. Includes equipment, power unit and labor costs.	Acre	\$78.10	1	\$78.10
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$18.39	1	\$18.39

Foregone Income

FI, Organic, Vegetables	2252	Vegetables is Primary Crop	Acre	\$1,303.51	1	\$1,303.51
-------------------------	------	----------------------------	------	------------	---	------------

Practice: 386 - Field Border

Scenario: #6 - Organic Seeding, Field Crop Operation

Scenario Description: A strip of permanent vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production. Associated Practices: Herbaceous Weed Control (315), Conservation Cropping Rotation (328), Critical Area Planting (342), Nutrient Management (590), Integrated Pest Management (595), Prescribed Grazing (528).

Before Situation: Before practice conditions may vary widely. Fields may have erosion issues from wind or water, a field border may be needed to manage pest populations, protect soil and water quality, provide wildlife food and cover, provide pollinator habitat, or a field border may be used to increase carbon storage and improve air quality. Water quality, soil erosion and/or wildlife food and cover may all be primary resource concerns.

After Situation: This practice when applied around a field will support and connect other buffer practices while creating a buffer between organic systems and conventional cropping systems. Organic grasses and legumes will be established around the field edges to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species selected shall be adapted to site, not function as a host for diseases of a field crop and have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area.

Scenario Feature Measure: Number of Acres

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$608.23

Scenario Cost/Unit: \$608.23

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

Materials

Certified Organic, Three Species Mix, Cool Season, Perennial Grasses and Legumes	2340	Certified organic cool season perennial grass and legume mix. Includes material and shipping only.	Acre	\$69.62	1	\$69.62
Nitrogen, Organic	266	ORGANIC Nitrogen	Pound	\$0.25	50	\$12.53
Phosphorus, Organic	267	ORGANIC Phosphorus	Pound	\$0.25	10	\$2.50

Equipment Installation

Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$7.61	1	\$7.61
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Site Preparation, Mechanical	944	Aerator, rolling drum chopper, etc. Includes equipment, power unit and labor costs.	Acre	\$78.10	1	\$78.10
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$18.39	1	\$18.39

Foregone Income

FI, Organic, Corn Dryland	2232	Organic Dryland Corn is Primary Crop	Acre	\$419.40	0.5	\$209.70
FI, Organic, Soybeans Dryland	2234	Organic Dryland Soybeans is Primary Crop	Acre	\$439.39	0.25	\$109.85
FI, Organic, Wheat Dryland	2236	Organic Dryland Wheat is Primary Crop	Acre	\$305.07	0.25	\$76.27

Practice: 386 - Field Border

Scenario: #11 - Pollinator Seeding, Native Forbs and Legumes, Field Crop Operation

Scenario Description: Objective is to provide high quality habitat beneficial to pollinators and other wildlife along the edge of a field. The mix is predominantly native forbs and legumes, but may contain some native grasses. The mix is typically preconfigured and commercially available from native seed suppliers. The cropland is taken out of production. Associated Practices: Herbaceous Weed Control (315), Upland Wildlife Habitat Management (645), Early Successional Habitat Development and Management (647), Tree and Shrub Planting (612)

Before Situation: Field is in crop production with only woodland or other crop fields along the border.

After Situation: A field border of 30 to 60 feet is established as a native wildflower meadow to provide habitat for for pollinators and other wildlife. The field border creates a soft edge between the crop field and adjacent woodland.

Scenario Feature Measure: Treated area

Scenario Unit: Acre

Scenario Typical Size: 1

Total Scenario Cost: \$998.16

Scenario Cost/Unit: \$998.16

Cost Details

Component Name	Id	Description	Unit	Cost	Qty	Total
----------------	----	-------------	------	------	-----	-------

Materials

Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	1	\$15.93
Herbicide, Surfactant	1095	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. Includes materials and shipping only.	Acre	\$1.30	1	\$1.30
Three Species Mix, Native Forb	2333	Native forb mix. Includes material and shipping only.	Acre	\$586.90	1	\$586.90

Equipment Installation

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.80	1	\$6.80
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$23.66	1	\$23.66
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$12.34	1	\$12.34

Foregone Income

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$346.36	0.5	\$173.18
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$356.12	0.5	\$178.06