

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	340 - Cover Crop
Scenario ID	1
Scenario Name	Cover Crop
Scenario Description	Establish a small grain, grass, or brassica (including forage sorghum, radishes, turnips, buckwheat, etc) cover crop by broadcasting, no-till drill, or other approved methods. Cover crop is established during spring, summer, or fall and terminated according to state specifications.
Before Practice Situation	Row crops such as corn, vegetables or tobacco are harvested resulting in bare soil being exposed to wind erosion and/or intense rainfall during the fall, winter, and early spring. Residual soil nitrogen is lost through leaching, and phosphorus is transported to nearby surface water resulting in decreased soil and water quality. Soil health (soil organic matter) declines over time as a result of tillage practices, low residue crops, and long periods of bare soil.
After Practice Situation	Cover crop is seeded after row crop harvest and soil is covered. Erosion from wind and water is minimized. Residual nitrogen is captured by the cover crop, phosphorus transport is reduced, and water quality is improved. Soil health (including organic matter) is improved. Cover crop is terminated according to state specifications.
Scenario Feature Measure	Acres of cover crop
Scenario Unit	Acre
Scenario Typical Size	20

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,650.00	\$82.50
Equipment/Installation	\$733.60	\$36.68
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	\$2,383.60	\$119.18

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	198	Rye, Cereal (Secale cereale L.)	Small Grains, Cover Crops and shipping.	Pound	\$0.75	2200	\$1,650.00
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	20	\$192.40
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	\$17.43	20	\$348.60
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	20	\$192.60

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Region	New England
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Practice Code/Name	340 - Cover Crop
Scenario ID	5
Scenario Name	Interseed
Scenario Description	Used to interseed, undersow, or overseed a cover crop into an existing crop. Can also be used as nurse crop or for other state approved purposes. Typically used to seed clover into a row crop, vegetables, or an orchard or vineyard alley, but can be used for a variety of cover crops and situations. Follow state specifications for interseeding crops, rates, and dates. Assumes seed and seeding costs only, and does not include termination costs. Assumes cover crop is terminated by already planned operations such as spring tillage, mowing alleys, grazing etc...
Before Practice Situation	Cash crops have been planted but are not harvested. There is bare soil between the rows and intense rainfall during the fall, winter, and early spring will cause erosion after the cash crop is harvested. Residual soil nitrogen will be lost through leaching, and phosphorus will be transported to nearby surface water resulting in decreased soil and water quality. Soil health (soil organic matter) is declining over time as a result of tillage practices, low residue crops, and long periods of bare soil.
After Practice Situation	Approved cover crops are seeded into standing cash crop and soil is covered. Erosion from wind and water is minimized. Residual nitrogen is captured by the cover crop, phosphorus transport is reduced, and water quality is improved. Soil health (including organic matter), soil structure, and microbial diversity is improved. Energy is saved through the use of legume nitrogen versus Haber-Bosch nitrogen.
Scenario Feature Measure	Acres of cover crop
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$390.00	\$39.00
Equipment/Installation	\$96.20	\$9.62
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	\$486.20	\$48.62

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	150	\$390.00
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	10	\$96.20

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Region	New England
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Discipline Group	Agronomy
Practice Code/Name	340 - Cover Crop
Scenario ID	3
Scenario Name	Legume - Soil Health
Scenario Description	Establish a pure legume cover crop or a multi-species soil health mix (typically a legume with 2-4 other small grain, grass or legume species) by broadcasting, no-till drill, or other approved methods. The scenario is typically used to improve soil organic matter, nitrogen, microbial populations and overall soil health. Cover crop is established during spring, summer, or fall and terminated according to state specifications.
Before Practice Situation	Row crops such as corn, vegetables or tobacco are harvested resulting in bare soil being exposed to wind erosion and/or intense rainfall during the fall, winter, and early spring. Residual soil nitrogen is lost through leaching, and phosphorus is transported to nearby surface water resulting in decreased soil and water quality. Soil health (soil organic matter) declines over time as a result of tillage practices, low residue crops, and long periods of bare soil.
After Practice Situation	Legume cover crop or multi-species soil health mix is seeded after row crop harvest and soil is covered. Erosion from wind and water is minimized. Residual nitrogen is captured by the cover crop, phosphorus transport is reduced, and water quality is improved. Soil health (including organic matter), soil structure, and microbial diversity is improved. Cover crop is terminated according to state specifications.
Scenario Feature Measure	Acres of cover crop
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,158.00	\$115.80
Equipment/Installation	\$270.50	\$27.05
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	\$1,428.50	\$142.85

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	197	Oats (Avena sativa)	Small Grains, Cover Crops and shipping.	Pound	\$0.91	650	\$591.50
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	150	\$390.00
Materials	171	Radish, Forage (Raphanus sativus var. niger)	Brassicas / Non-Legume Broadleaf, Cover Crops and shipping.	Pound	\$3.53	50	\$176.50
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	10	\$96.20
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	\$17.43	10	\$174.30

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Practice and Scenario Description:

Information Type	Data
Region	New England
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Discipline Group	Agronomy
Practice Code/Name	340 - Cover Crop
Scenario ID	2
Scenario Name	Organic Cover Crop
Scenario Description	Establish a certified organic small grain, grass, or brassica (including forage sorghum, radishes, turnips, buckwheat, etc) cover crop on organic or transitioning to organic land by broadcasting, no-till drill, or other approved methods. Cover crop is established during spring, summer, or fall and terminated according to state specifications. Must use certified organic seed.
Before Practice Situation	Row crops such as corn, vegetables or tobacco are harvested from organic or transitioning to organic land resulting in bare soil being exposed to wind erosion and/or intense rainfall during the fall, winter, and early spring. Residual soil nitrogen is lost through leaching, and phosphorus is transported to nearby surface water resulting in decreased soil and water quality. Soil health (soil organic matter) declines over time as a result of tillage practices, low residue crops, and long periods of bare soil.
After Practice Situation	Certified organic cover crop is seeded after row crop harvest and soil is covered. Erosion from wind and water is minimized. Residual nitrogen is captured by the cover crop, phosphorus transport is reduced, and water quality is improved. Soil health (including organic matter) is improved. Cover crop is terminated according to state specifications.
Scenario Feature Measure	Acres of cover crop
Scenario Unit	Acre
Scenario Typical Size	20

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$2,266.00	\$113.30
Equipment/Installation	\$733.60	\$36.68
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	\$2,999.60	\$149.98

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	203	Certified Organic, Rye, Cereal (Secale cereale L.)	Small Grains, Cover Crops and shipping.	Pound	\$1.03	2200	\$2,266.00
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	20	\$192.40
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	\$17.43	20	\$348.60
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	20	\$192.60

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	340 - Cover Crop
Scenario ID	4
Scenario Name	Organic Legume - Soil Health
Scenario Description	Establish a certified organic, pure legume cover crop or a multi-species soil health mix (typically a legume with 2-4 other small grain, grass or legume species) on organic or transitioning to organic land by broadcasting, no-till drill, or other approved methods. The scenario is typically used to improve soil organic matter, nitrogen, microbial populations and overall soil health. Cover crop is established during spring, summer, or fall and terminated according to state specifications. Must use certified organic seed.
Before Practice Situation	Row crops such as corn, vegetables or tobacco are harvested from organic or transitioning to organic land resulting in bare soil being exposed to wind erosion and/or intense rainfall during the fall, winter, and early spring. Residual soil nitrogen is lost through leaching, and phosphorus is transported to nearby surface water resulting in decreased soil and water quality. Soil health (soil organic matter) declines over time as a result of tillage practices, low residue crops, and long periods of bare soil.
After Practice Situation	Certified organic legume cover crop or multi-species soil health mix is seeded after row crop harvest and soil is covered. Erosion from wind and water is minimized. Residual nitrogen is captured by the cover crop, phosphorus transport is reduced, and water quality is improved. Soil health (including organic matter), soil structure, and microbial diversity is improved. Cover crop is terminated according to state specifications.
Scenario Feature Measure	Acre of cover crop
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$2,147.50	\$214.75
Equipment/Installation	\$192.50	\$19.25
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	\$2,340.00	\$234.00

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	202	Certified Organic, Oats (Avena sativa)	Small Grains, Cover Crops and shipping.	Pound	\$1.08	650	\$702.00
Materials	117	Certified Organic, Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$8.46	150	\$1,269.00
Materials	175	Certified Organic, Radish, Forage (Raphanus sativus var. niger)	Brassicas / Non-Legume Broadleaf, Cover Crops and shipping.	Pound	\$3.53	50	\$176.50
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	10	\$96.20
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