

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	North Carolina
Discipline Group	Wildlife Wetland
Practice Code/Name	645 - Upland Wildlife Habitat Management
Scenario ID	5
Scenario Name	Establish Annual Vegetation
Scenario Description	This scenario covers all upland habitats, that are not covered under 643 for the establishment of annual (non-persistent) vegetation on all land uses. This scenario is utilized when habitat assessment indicates inadequate habitat for fish or wildlife-habitat degradation. The typical size range for this scenario is 5 to 50 acres. This scenario would be applied on any land use where habitats are utilized by targeted species. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality and develop wildlife habitat as part of a habitat management system. Often times this scenario is utilized to temporarily provide cover or forage while permanent vegetation is being established. Establishment of vegetation will require methods including light disking, herbicide application and use of seed drill for planting. Fertilization will be required and will be completed in response to a soil test.
Before Practice Situation	The establishment of Annual Vegetation for targeted wildlife species on existing cropland fields. A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need to establish annual (non-persistent) vegetation to bring one or more habitat limiting factors of inadequate habitat for fish and wildlife, up to planning criteria. An evaluation of the site has indicated resource concerns are present, or may become present during the implementation of the habitat management system planned. Resource concerns identified may include soil erosion with visible rills present resulting in sediment moving offsite into surface water degrading water quality. Soil quality (soil organic matter) declines over time as a result of tillage practices, low residue, and long periods of bare soil. Air quality may be impacted during field operations by the creation of particulates. The current system provides little to no wildlife habitat with habitat limiting factors such as quality, quantity and continuity of forage, cover, shelter and space being identified.
After Practice Situation	Planning unit is adequately covered with annual (non-persistent) vegetation. As a result of installation soil erosion, water/sediment runoff, and/or dust emissions have been eliminated. Plants sown provide cover and forage for target species. Forage may include the vegetation itself or promote an abundance of beneficial insects. This scenario does not apply to plantings for forage production or critical area plantings and vegetation established under this scenario will remain unharvested.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	20

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,430.80	\$71.54
Equipment/Installation	\$377.40	\$18.87
Labor	\$0.00	\$0.00
Mobilization	\$63.20	\$3.16
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,871.40	\$93.57

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	\$11.04	20	\$220.80
Materials	172	Buckwheat (Fagopyrum esculentum)	Brassicas / Non-Legume Broadleaf, Cover Crops. Shipping not included.	Pound	\$0.74	400	\$296.00
Materials	177	Sorghum-Sudan Grass (Sorghum bicolor (L.) Moench)	Annual Grasses, Cover Crops and shipping.	Pound	\$1.29	100	\$129.00
Materials	184	Cow Pea (Vigna unguiculata)	Legumes, Cover Crops and shipping.	Pound	\$1.57	500	\$785.00
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$4.41	20	\$88.20
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$14.46	20	\$289.20
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	\$63.20	1	\$63.20

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Discipline Group	Wildlife Wetland
Practice Code/Name	645 - Upland Wildlife Habitat Management
Scenario ID	1
Scenario Name	Wildlife Structures of Low Intensity with Low Complexity
Scenario Description	This scenario covers all upland habitats, that are not covered under 645, that need installation of wildlife structures, which are of low intensity and low complexity, when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. This scenario include structures such as: habitat boxes. Intensity is the number of structures to be installed per acre. For this scenario the intensity is <0.5 structure per acre. Complexity is defined by the combination of skill level, equipment needed and ease of accessibility for creating and installing these structures. For this scenario the complexity would include: general labor with minimal supervision or skilled labor without supervision; common hand tools and equipment; installation is within a quarter mile of a driveable road; and terrain is gentle to moderate. This practice may be installed alone or in combination with facilitating practices. Facilitating practices may include but not limited to: 382, 391, 647, 660 and 666.
Before Practice Situation	A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need for wildlife structures of low intensity with low complexity to bring one or more habitat limiting factors under Inadequate Habitat for Fish or Wildlife, up to planning criteria. Upland habitat limiting factors include quality, quantity and continuity of forage, cover, shelter, space and water availability. Less than 0.5 structure per acre is needed to bring the deficient habitat limiting factor up to planning criteria. The structures can be installed within a quarter mile of a driveable road and terrain is gentle to moderate. (consider all the fence markers as one structure)
After Practice Situation	Installation of wildlife structures bring the identified deficient habitat limiting factors up to planning criteria. The practice is installed using general labor with minimal supervision or skilled labor without supervision with use of common hand tools and small equipment;
Scenario Feature Measure	< 0.5 structures / acre
Scenario Unit	Acres
Scenario Typical Size	25

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$902.64	\$36.11
Equipment/Installation	\$26.31	\$1.05
Labor	\$112.02	\$4.48
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,040.97	\$41.64

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	248	Habitat Box, Bee	Wood structure with nesting holes (distinct or randomized patterns) made of wood, plastic, or glass.	Each	\$32.29	12	\$387.48
Materials	1461	Predator Guard	Predator guards (i.e. stove pipes, cone, hole guard, etc.) for habitat boxes. Materials only	Each	\$32.24	12	\$386.88
Materials	10	Post, Wood, CCA treated, 4" x 8'	Wood Post, Line 4" X 8', CCA Treated	Each	\$10.69	12	\$128.28
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.31	1	\$26.31
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	\$18.67	6	\$112.02

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Discipline Group	Wildlife Wetland
Practice Code/Name	645 - Upland Wildlife Habitat Management
Scenario ID	8
Scenario Name	Snag Creation
Scenario Description	Create snags from existing live trees to provide nesting, foraging, perching, thermal cover, and display habitat for target species such as cavity nesting birds (woodpeckers, songbirds, wood duck, etc), small mammals (shrew, chipmunk, flying squirrel, bats, etc.), amphibians and reptiles and bumble bees. Trees must be at least 12" DBH. Resulting snag will be a minimum of 25' tall. Snag creation method is girdling 3' deep with a chainsaw.
Before Practice Situation	A 15 acre operation managing for quail and other small game habitat. Shrubby/woody escape cover is often the missing habitat component for bobwhite quail and other small game in fields managed for early successional wildlife. These structures are targeted for areas that lack sufficient snag habitat conditions to support viable populations of targeted species. Insufficient cavity nests, foraging, and perching habitat exists on the planning unit. Existing snag habitat is lacking or not well distributed.
After Practice Situation	Installation of wildlife structures (downed trees/snags) bring the identified deficient habitat limiting factors up to planning criteria. Snag creation enhances the overall habitat condition for numerous terrestrial species. These structures/features enhance habitat and improve species survivability. By providing cavity nesting sites, invertebrate foraging area, perching/hunting opportunities, and thermal cover/escape cover, larger open spaces are more effectively used by cavity nesting birds and pollinators, amphibians, reptiles, and small mammals. Increased cover reduces predation. Facilitating practices may include but not limited to: Watering Facility (614), Wetland Creation (658), Wetland Restoration (657), Wetland Enhancement (659), Early Successional Habitat Management/Development (647), Prescribed Burning (338), Restoration and Management of Rare and Declining Habitats (643), and Conservation Cover (327).
Scenario Feature Measure	Area of acres
Scenario Unit	Acre
Scenario Typical Size	15

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$352.19	\$23.48
Labor	\$306.32	\$20.42
Mobilization	\$37.98	\$2.53
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$696.49	\$46.43

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	962	Tractor, agricultural, 120 HP	Agricultural tractor with horsepower range of 90 to 140. Equipment and power unit costs. Labor not included.	Hour	\$47.06	6	\$282.36
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.31	1	\$26.31
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.44	8	\$43.52
Labor	231	General Labor	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.67	8	\$149.36
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.62	8	\$156.96
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.55	1	\$18.55
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	\$19.43	1	\$19.43

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Discipline Group	Wildlife Wetland
Practice Code/Name	645 - Upland Wildlife Habitat Management
Scenario ID	2
Scenario Name	Monitoring, Management, No Foregone Income - No Training Required, Low Intensity and Low Complexity
Scenario Description	Setting is any lands with the potential to provide upland wildlife habitat and that potential is not currently being captured. The identified upland wildlife habitat limiting factors can be restored, enhanced or created, with the application of this practice alone, or in combination with other supporting and facilitating practices. Monitoring will be used to determine if the conservation system meets or exceeds the minimum quality criteria for the targeted wildlife. Management will be implemented based on the findings of the habitat assessment and monitoring. Upland wildlife habitat management and monitoring needed to treat the resource concerns requires no training, no qualitative data assessment, no water quality monitoring and is low in complexity and intensity. Examples of prescribed monitoring, include but are not limited to: photo points taken, use documentation by livestock, regeneration/breeding success, completing an annual management records log, documenting wildlife sightings, documenting location and species of invasive plants and condition of vegetative and structural treatments. No decision or treatment associated with this practice or facilitating practices will require income foregone. The planner will specify locations and identify the methods to the customer who
Before Practice Situation	Existing degraded plant conditions and resulting inadequate habitat for fish and wildlife have resulting in low use of the area by target and associated upland wildlife species.
After Practice Situation	Based on the results of a State-approved upland wildlife habitat assessment process, the application of upland wildlife habitat management efforts and prescribed monitoring have been implemented. With the application of this practice alone, or in combination with other supporting and facilitating practices, the inadequate upland wildlife habitat conditions have addressed. Monitoring has maximized the benefits of the needed upland wildlife habitat treatment efforts.
Scenario Feature Measure	Acres Managed and Monitored
Scenario Unit	Acre
Scenario Typical Size	100

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$28.76	\$0.29
Labor	\$74.68	\$0.75
Mobilization	\$81.75	\$0.82
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$185.19	\$1.85

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	965	All terrain vehicles, ATV	Includes equipment, power unit and labor costs.	Hour	\$28.76	1	\$28.76
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	\$18.67	4	\$74.68
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	\$63.20	1	\$63.20
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.55	1	\$18.55