

## NRCS Practices Effects on Threatened and Endangered Species (T&E)

Zero (0) - No affect or not likely to adversely affect T&E species

Minus (-) - Potential adverse effect on T&E species if present (May require further consultation.)

Plus (+) - Practice may beneficially affect T&E species if present

This table shall be used to assist in making planning decisions regarding threatened and endangered species. Numbers adjacent to Xs correspond to footnotes at the end of the table. Refer to the “Kentucky’s Guidance Document For NRCS Compliance with the Endangered Species Act (ESA)” for further guidance on use of this table and other tools.

Practice Name and Unit	Practice Code	0	-	+
Access Road (Feet)	560		X1, X3	
Agrichemcial Handling Facility	998	X		
Animal Trails and Walkways	575		X1, X3	
Brush Management (Acre)	314		X1,X5	
Channel Vegetation (Acre)	322		X1, X2, X3, X10	
Clearing and Snagging (Feet)	326		X1,X2, X3, X19	
Closure of Waste Impoundments (No)	360	X		
Commercial Fish Ponds (Catfish)	397A		X1, X3, X4	
Commercial Fish Ponds (Shrimp)	397B		X1, X3, X4	
Composting Facility (No)	317		X1, X3	
Conservation Cover (Acre)	327		X5	
Conservation Cropping Rotation (Acre)	328	X		
Constructed Wetland (Acre)	656		X1, X3	
Contour Buffer Strips (Acre)	332		X5	
Contour Farming (Acre)	330	X		
Contour Orchard and Other Fruit Area (Acre)	331	X		
Cover and Green Manure (Acre)	340	X		
Critical Area Planting (Acre)	342		X5	
Deep Tillage (Acre)	324	X	X1	
Dike (Feet)	356		X1, X3	
Diversion (Feet)	362		X1, X3	
Dry Hydrant (Each)	432	X		
Fence (Feet)	382	X		X6
Field Border (Feet)	386		X5	
Filter Strip (Acre)	393		X5	X6
Firebreak (Feet)	394		X1, X3, X5	
Fish Raceway or Tank (ft & ft <sup>3</sup> /sec)	398		X1,X3,X4	
Fishpond Management (No)	399	X		
Forage Harvest Management	511	X		
Forest Site Preparation (Acre)	490		X1, X3, X5	
Forest Stand Improvement (Acre)	666		X1, X3	
Forest Trails and Landings (Acre)	655		X1, X3	
Grade Stabilization Structure (No)	410		X1, X3, X10	X6
Grassed Waterway (Acre)	412		X1, X3	
Grazing Land Mechanical Treatment	548		X1, X3	
Heavy Use Area Protection (Acre)	561		X1, X3	
Hedgerow Planting (Feet)	422		X5	
Irrigation Land Leveling (Acre)	464		X1	

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Practice Name and Unit	Practice Code	0	-	+
Irrigation Storage Reservoir (No/Acre-Feet)	436		X1	
Irrigation System Sprinkler (No/Acre)	442	X		
Irrigation System, Surface and Subsurface	443	X		
Irrigation Water Conveyance, Pipeline (Feet)	430	X		
Irrigation Water Management (Acre)	449	X		
Land Clearing (Acre)	460		X1, X3, X19	
Land Reclamation, Fire Control (No)	451		X1, X3, X19	
Land Reclamation			X1, X3, X19	
Land Slides	453			
Subsidence Treatment (No/Acre)	454			
Toxic Discharge Control (No)	455			
Highwall Treatment (No/Feet)	456			
Land Reconstruction			X1, X3, X19	
Abandoned Mine Land (Acre)	543			
Currently Mined Land (Acre)	544A			
Land Smoothing (Acre)	466		X1, X3	
Lined Waterway or Outlet (Feet)	468		X1, X3	
Manure Transfer (No)	634	X		
Mulching (Acre)	484	X		
Nutrient Management (Acre)	590		X16	
Obstruction Removal (Acre)	500		X1, X2, X3	
Open Channel (Feet)	582		X1, X3, X18	
Pasture and Hayland Planting (Acre)	512		X5	
Pest Management (Acre)	595		X5	
Pipeline (Feet)	516		X1	
Pond (No)	378		X1, X3	
Pond Sealing or Lining		X		
Flexible Membrane Lining (No)	521-A			
Soil Dispersant (No)	521-B			
Bentonite Sealant (No)	521-C			
Cationic Emulsion (No)	521-D			
Asphalt Sealed Fabric Liner (No)	521-E			
Precision Land Forming (Acre)	462		X1	
Prescribed Burning (Acre)	338		X1, X3	
Prescribed Grazing (Acre)	528A	X		
Pumping Plant for Water Control (No)	533		X1	
Recreation Area Improvement (Acre)	562		X1	
Recreation Land Grading and Shaping (Acre)	566		X1, X3	
Recreation Trail and Walkway (Feet)	568		X1, X3	
Residue Management: Seasonal (Acre)	344	X		
Residue Management: Mulch Till (Acre)	329B	X		
Residue Mgt.: No-Till & Strip Till (Acre)	329A	X		
Residue Management: Ridge Till (Acre)	329C	X		
Restoration & Mgt. of Declining Habitat (Ac)	643		X5	

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Practice Name and Unit	Practice Code	0	-	+
Riparian Forest Buffer (Acre)	391A		X1,X5	X6,X7,X8
Roof Runoff Structure (No)	558	X		
Row Arrangement (Acre)	557	X		
Sediment Basin (No)	350		X1, X3	
Shallow Water Management For Wildlife(Ac)	646			X7, X14
Sinkhole Protection (Acre)	725		X9	X15
Spoil Spreading (Feet)	572		X1	
Spring Development (No)	574		X1, X20	
Stream Crossing (No)	578		X1, X2, X3, X10, X19	
Streambank and Shoreline Protection (Feet)	580		X1, X2, X3,X10, X19	X6
Stripcropping, Contour (Acre)	585	X		
Structure For Water Control (No)	587		X1, X3	
Subsurface Drain (Feet)	606		X1, X3, X18	
Surface Drainage			X1, X3, X18	
Field Ditch (Feet)	607			
Main or Lateral (Feet)	608			
Terrace (Feet)	600		X1, X3	
Tree and Shrub Pruning (Acre)	660		X3	
Tree/Shrub Establishment (Acre)	612		X5	X11
Underground Outlet (Feet)	620		X18	
Upland Wildlife Habitat Management (Acre)	645		X1, X3, X13	X17
Use Exclusion (Acre)	472		X21	X6
Vertical Drain (No)	630	X		
Waste Field Storage (Ea)	749	X		
Waste Storage Facility (No)	313		X1, X3	
Waste Treatment Lagoon (No)	359		X1, X3	
Waste Utilization (Acre)	633		X16	
Wastewater Treatment Strip	635		X5	
Water and Sediment Control Basin (No)	638		X1, X3	
Water Well (No)	642		X1	
Watering Facility (No.)	614		X1, X3	
Well Decommissioning (No)	351	X		
Wetland Restoration (Acre)	657		X1, X3, X12	X7,X8
Wetland Creation (Acre)	658		X1, X3,	X7, X8
Wetland Wildlife Habitat Management (Acre)	644	X		
Wildlife Watering Facility (No)	648		X1, X3	X14
Windbreak/Shelterbelt Establishment (Acre)	380		X5	
Windbreak/Shelterbelt Renovation (Acre)	580		X3	

X1 – Earthmoving or placement of these practices may negatively affect threatened or endangered plant species. Further investigation is required if the practice will be placed in a habitat type where a threatened or endangered plant may reside. Review the habitat type, plant characteristics and appearance in the Kentucky Department of Fish and Wildlife Resources

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publication entitled Kentucky's Threatened and Endangered Species, 2001. Make a visual observation of the area to determine if the species or habitat for the species exists. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when a threatened or endangered plant is identified or evidence suggests that it exists on the project area.

X2 – Appropriate permits, if required, must be acquired prior to conducting clearing and snagging or any earthmoving activities along or in streams. NRCS shall only provide assistance when the work will be in accordance with the appropriate permits.

X3 – Tree removal during land clearing for these practices may adversely affect the Indiana bat if conducted at the wrong time of the year. Trees with a diameter at breast height (DBH) of less than 5 inches may be removed anytime during the year following review of other T & E species requirements. Other trees may be removed anytime during the year provided the trees do not have the following characteristics: tree species with exfoliating bark such as shell and shag bark hickories and white oak species; dead and dying trees with exfoliating bark, broken tree tops, splintered or split areas; trees with cavities or hollowed areas.

In counties noted to have the Indiana bat, NRCS must plan tree removal for trees with the above identified characteristics for periods between November 15<sup>th</sup> and March 31<sup>st</sup>. In counties noted to have the Indiana bat, contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when planning removal of trees with the above identified characteristics when removal can't occur between November 15<sup>th</sup> and March 31<sup>st</sup>.

X4 – Currently, Kentucky NRCS is not providing technical or financial assistance for installation or management of commercial fish ponds. If in the future, NRCS provides technical or financial assistance for commercial fish ponds, the NRCS State Biologist must be contacted for assistance using form NRCS-KY-CPA-52b during the planning process if the commercial pond will be built in a watershed where threatened or endangered aquatic species are listed.

X5 – Herbicide application or conventional tillage planned as part of these practices may adversely affect listed plant species if present. Further investigation is required if the practice will be placed in a habitat type where a threatened or endangered plant may reside. Review the habitat type, plant characteristics and appearance in the Kentucky Department of Fish and Wildlife Resources publication entitled Kentucky's Threatened and Endangered Species, 2001. Make a visual observation of the area to determine if the species or habitat for the species exists. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when a threatened or endangered plant is identified or evidence suggests that it exists on the project area.

X6 – Practices will have a beneficial effect if the practice is installed on a stream or direct tributary to a stream that has aquatic threatened or endangered species as indicated in the Species By County List. Beneficial effects shall not apply to listed species of the Ohio River when practices are planned on tributaries to the Ohio River. These practices will also provide beneficial effects when planned around sinkholes in counties where the Kentucky Cave Shrimp is listed. A beneficial affect can be noted when planning fence to exclude livestock from the above identified aquatic resources.

X7 – Practice will have a beneficial effect if the practice is installed in a county noted to contain the Copperbelly Water Snake.

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X8 – Practice will have a beneficial effect if the practice is installed in a county that contains the Indiana bat.

X9 – Prior to filling, closing or stabilizing an open throated sinkhole in a county noted to have Indiana, Gray, or Virginia Big Eared Bats, an investigation must be done to determine if any of these species utilize the sinkhole. These activities may also affect the Mammoth Cave Shrimp if conducted in a watershed where this species is present. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b if filling, closing, or stabilizing an open throated sinkhole is planned in a county or watershed where one of the above listed species are present.

X10 – A short term adverse effect, long term beneficial effect may occur during practice installation on stream segments that are noted to have aquatic threatened or endangered species. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when planning these practices on stream segments noted to have threatened or endangered aquatic species.

X11- Tree and shrub establishment will have beneficial effects when it is planned in any county with the Indiana bat or on flood plain soils in counties noted to contain the Copperbelly Water Snake.

X12 - Wetland Restoration plans shall be reviewed by the USFWS.

X13 – Strip disking or forest openings done under Wildlife Upland Habitat Management (645) may adversely affect threatened or endangered plants. Further investigation is required if strip disking or forest openings will be planned in a habitat type where a threatened or endangered plant may reside. Review the habitat type, plant characteristics and appearance in the Kentucky Department of Fish and Wildlife Resources publication entitled Kentucky's Threatened and Endangered Species, 2001. Make a visual observation of the area to determine if the species or habitat for the species exists. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when a threatened or endangered plant is identified or evidence suggests that it exists on the project area.

X14 – Practice will have a beneficial effect when installed in counties noted to contain the Indiana bat, Gray bat, or Virginia Big-eared bat.

X15 – Positive effect in counties where the Kentucky Cave Shrimp is listed if protection of the sinkhole does not include filling.

X16 – The following applies when animal waste is being land applied in watersheds where threatened or endangered aquatic species are listed:

- 1) When applicable, NRCS conservation plans shall include the required waste application set backs established in the Kentucky Division of Water's AFO/CAFO regulations and permit requirements.
- 2) When the Kentucky Division of Water's AFO/CAFO regulations do not apply, waste applications must be planned at least 40 feet from perennial, seasonal, and ephemeral streams, surface ditches, openings of open throated sinkholes, and other sensitive areas.

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X17 – Positive effect when a cave gate is being placed over the entrance of a cave, mine, or other opening where Threatened or Endangered species reside. The NRCS State Biologist must be contacted when planning to install cave gates.

X18 – All planned drainage must comply with NEPA, the Clean Water Act, and the Swamp Buster Provision of the Food Security Act.

X19 - Tree removal or land clearing around Bald Eagle nests may have an adverse effect on the species. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when Bald Eagle nests are identified during the planning process.

X20 – Spring development in watersheds identified as having the Relict Darter may have an adverse effect on the species. Contact the NRCS State Biologist for assistance using form NRCS-KY-CPA-52b when planning spring development in watersheds identified as having the Relict Darter by the Species List By County.

X21 – If earth moving is required as part of the Use Exclusion (472) practice see X1 above. If tree removal is required as part of the Use Exclusion (472) practice see X3 above.