Tennessee River

Conservation Opportunity Area

The Tennessee River Conservation Opportunity Area encompasses portions of the Tennessee River, Buffalo River, and Duck River, which provide important aquatic and terrestrial habitat in the river channels, floodplains, and surrounding uplands. In this COA, the Tennessee River is impounded by Kentucky Dam and is an important recreation area for boating, wildlife viewing, recreational fishing, commercial fishing, and hunting. The section of the Tennessee River in this COA below Wheeler Dam is perhaps the best example of "big river" habitat remaining in Tennessee and is home to rare species of mussels and fishes that are state or federally listed as threatened or endangered. Other important species such as the Pygmy Rattlesnake can be found in terrestrial habitats along the river. The primary land uses in the adjacent floodplains are agriculture and forestry.

Photo: Pygmy Rattlesnake - Rob Colvin, TWRA

The Tennessee River COA also includes extensive upland hardwood forests and pockets of limestone glade and barrens habitats. Public lands, including Land Between the Lakes, are distributed throughout the river corridor, providing important habitat conservation, recreation, and public education benefits.

TWRA will consider future land acquisitions in this COA for watershed protection, critical habitat protection, habitat restoration, streambank stabilization, planting of bottomland hardwoods, and buffer strip plantings along the river. The goal of land management projects is to establish or protect wide forested buffer zones along the rivers and promote the use of best management practices (BMPs) for farming, forestry, and construction projects.

The section of the Tennessee River in this COA below Wheeler Dam is perhaps the best example of "big river" habitat remaining in Tennessee

Public Lands within the COA

Bailey Fork Wetland, Bards Creek Refuge, Barkley Wildlife Management Area (WMA), Beason Creek Wetland, Beech River Wetland, Big Sandy WMA, Bruton Branch Recreation Area, Camden WMA, Carrol Cabin Barrens SNA, Chambers Creek Wetland, Cross Creek NWR, Cypress Pond Refuge, Dry Creek WMA, Eagle Creek WMA, Ft. Donelson National Battlefield, Harmon Creek WMA, Haynes BottomWMA, Holly Fork WMA, Johnsonville State Park (SP), Land Between the Lakes, Lick Creek WMA, Long Pond Refuge, Mousetail Landing SP, Natchez Trace State Forest/WMA, Natchez Trace SP, Nathan Bedford SP, New Hope WMA, Paris Landing SP, Perryville WMA, Pickwick Landing SP, Walker Branch State Natural Area, West Sandy WMA, White Oak WMA

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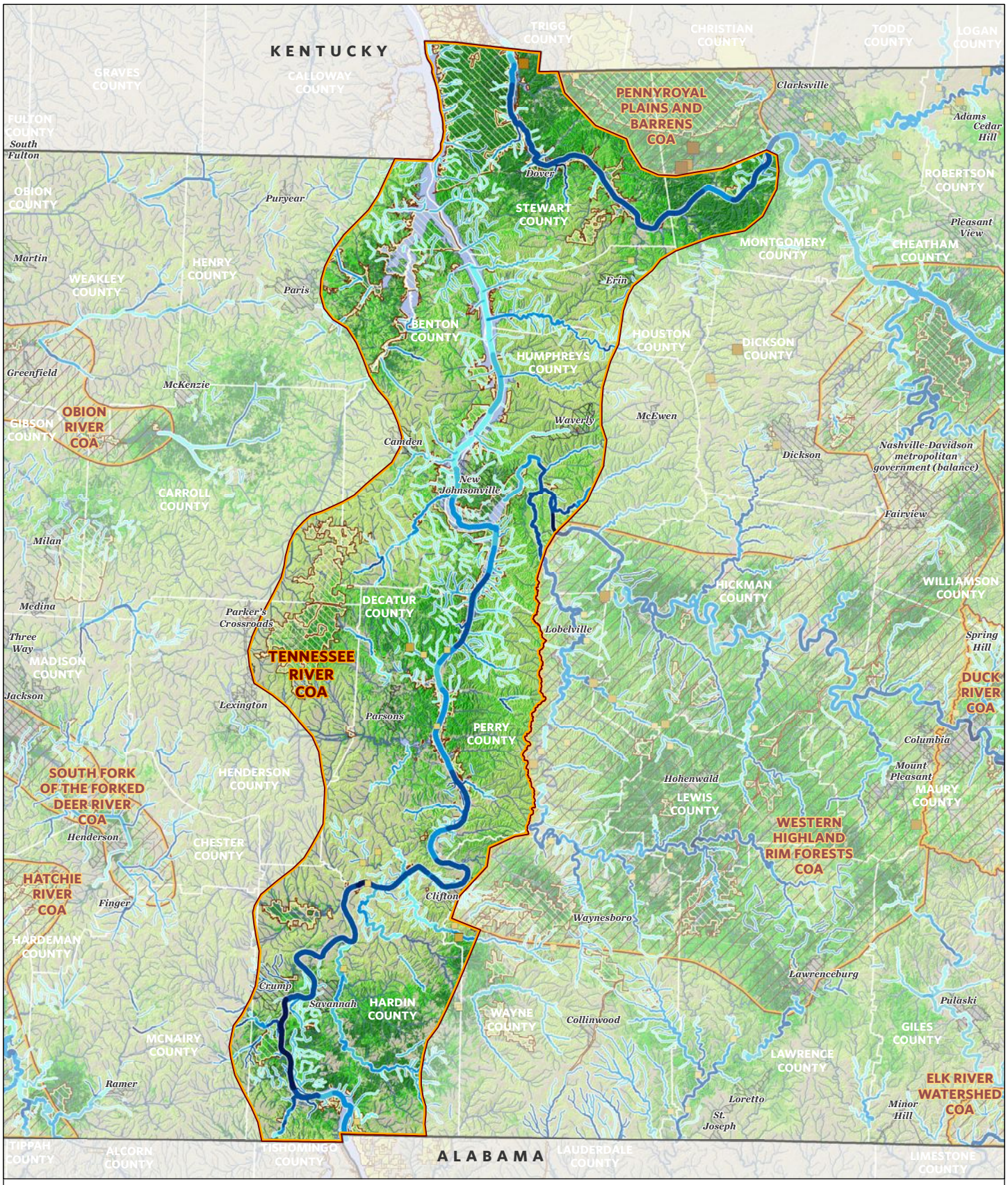
Partnerships

TWRA will also seek partnerships with other agencies and landowners to implement many of these management strategies on private lands within the COA. TWRA will develop and foster partnerships with the Tennessee Department of Environment and Conservation, Tennessee Department of Forestry, the Tennessee Valley Authority, the US Fish & Wildlife Service, The Nature Conservancy, Wolf River Conservancy, Tennessee Ornithological Society, Natural Resources Conservation Service, Farm Bureau, Tennessee Department of Agriculture Forestry Division, Ducks Unlimited, Cooperative Extensions, citizen scientists, universities, various other institutions, and local governments.

	Desired Change	Units
+	Restore acres of bottomland hardwood forest and width of riparian zone by converting former agriculture lands.	acres
+	Restore riparian buffers and physical stream habitat in priority locations throughout the watershed	miles
+	Create or improve buffers around tributaries and a sediment retention basin to reduce sediment load and runoff of contaminants into the lake.	acres
+	Increase acres of buffer habitat around sinkholes and caves.	acres
+	Increase mudflat and moist soil habitat through enhanced water management to provide habitat for migrating birds.	acres
+	Protect existing riparian zones and bottomland hardwood forests.	acres
✓	Preserve mussel habitat.	miles
+	Improve population viability of native freshwater mussel species.	animals
+	Increase Alligator Snapping Turtle populations in key habitat areas where numbers are low through propagation and translocation of individuals.	animals
✓	Reconnect the river channels in the COA to their floodplains to achieve a more natural ecological condition by working with TVA to improve dam management for the benefit of native habitat and species.	assists

To learn more about the Tennessee River Conservation Opportunity Area, please contact:
Rob Colvin, Wildlife Diversity Coordinator, Region 1 (731) 423-5725


KENTUCKY
TRIGG COUNTY
CHRISTIAN COUNTY
TODD COUNTY
LOGAN COUNTY
GRAVES COUNTY
CALLOWAY COUNTY
FULTON COUNTY
South Fulton
OBION COUNTY
Martin
WEAKLEY COUNTY
HENRY COUNTY
Puryear
Paris
Greenfield
McKenzie
GIBSON COUNTY
OBION RIVER COA
CARROLL COUNTY
Milan
Medina
Three Way
MADISON COUNTY
Jackson
Lexington
SOUTH FORK OF THE FORKED DEER RIVER COA
Henderson
HENDERSON COUNTY
CHESTER COUNTY
HATCHIE RIVER COA
Finger
HARDEMAN COUNTY
MCNAIRY COUNTY
Ramer
TIPPAH COUNTY
ALCORN COUNTY
TISHOMINGO COUNTY
ALABAMA
LAUDERDALE COUNTY
LIMESTONE COUNTY
PENNYROYAL PLAINS AND BARRENS COA
Clarksville
Adams
Cedar Hill
ROBERTSON COUNTY
Pleasant View
CHEATHAM COUNTY
Dover
STEWART COUNTY
MONTGOMERY COUNTY
Erin
BENTON COUNTY
HOUSTON COUNTY
DICKSON COUNTY
HUMPHREYS COUNTY
Waverly
McEwen
Camden
Dickson
Nashville-Davidson metropolitan government (balance)
New Johnsonville
Fairview
HICKMAN COUNTY
WILLIAMSON COUNTY
DECATUR COUNTY
Parker's Crossroads
Lobelville
Spring Hill
TENNESSEE RIVER COA
DUCK RIVER COA
Parsons
PERRY COUNTY
Columbia
Mount Pleasant
Hohenwald
LEWIS COUNTY
MAURY COUNTY
WESTERN HIGHLAND RIM FORESTS COA
Clifton
Waynesboro
Lawrenceburg
Pulaski
Crump
Savannah
HARDIN COUNTY
WAYNE COUNTY
Collinwood
GILES COUNTY
LAWRENCE COUNTY
ELK RIVER WATERSHED COA
Loretto
St. Joseph
Minor Hill
N
0 5 10 Miles
Habitat Priority
Karst Aquatic Terrestrial
Very High
High
Medium
Low
Very Low
Conservation Opportunity Area
Protected Land
The Nature Conservancy
Protecting nature. Preserving life.

	TENNESSEE RIVER COA GCN SPECIES (TN)
Taxa group	Scientific & Common names
Amphibian	Acris gryllus (Southern Cricket Frog)
Amphibian	Cryptobranchus alleganiensis (Hellbender)
Amphibian	Hemidactylium scutatum (Four-toed Salamander)
Amphibian	Hyla gratiosa (Barking Treefrog)
Amphibian	Hyla versicolor (Gray Treefrog)
Amphibian	Necturus maculosus (Mudpuppy)
Bat	Myotis grisescens (Gray Bat)
Bat	Myotis leibii (Eastern Small-footed Bat)
Bat	Myotis lucifugus (Little Brown Bat)
Bat	Myotis septentrionalis (Northern Myotis)
Bat	Myotis sodalis (Indiana Bat)
Bat	Perimyotis subflavus (Tri-colored Bat)
Bird	Accipiter striatus (Sharp-shinned Hawk)
Bird	Ammodramus henslowii (Henslow's Sparrow)
Bird	Ammodramus leconteii (LeConte's Sparrow)
Bird	Ammodramus savannarum (Grasshopper Sparrow)
Bird	Anas rubripes (American Black Duck)
Bird	Aquila chrysaetos (Golden Eagle)
Bird	Asio flammeus (Short-eared Owl)
Bird	Bartramia longicauda (Upland Sandpiper)
Bird	Botaurus lentiginosus (American Bittern)
Bird	Calidris himantopus (Stilt Sandpiper)
Bird	Calidris mauri (Western Sandpiper)
Bird	Calidris pusilla (Semipalmated Sandpiper)
Bird	Caprimulgus carolinensis (Chuck-will's-widow)
Bird	Caprimulgus vociferus (Whip-poor-will)
Bird	Cardellina canadensis (Canada Warbler)
Bird	Chaetura pelagica (Chimney Swift)
Bird	Charadrius melodus melodus (Piping Plover)
Bird	Chordeiles minor (Common Nighthawk)
Bird	Circus cyaneus (Northern Harrier)
Bird	Cistothorus platensis (Sedge Wren)
Bird	Colinus virginianus (Northern Bobwhite)
Bird	Egretta caerulea (Little Blue Heron)
Bird	Empidonax minimus (Least Flycatcher)
Bird	Empidonax traillii (Willow Flycatcher)
Bird	Euphagus carolinus (Rusty Blackbird)
Bird	Falco peregrinus (Peregrine Falcon)
Bird	Geothlypis Formosa (Kentucky Warbler)
Bird	Grus americana (Whooping Crane)
Bird	Haliaeetus leucocephalus (Bald Eagle)
Bird	Helmitheros vermivorum (Worm-eating Warbler)
Bird	Hylocichla mustelina (Wood Thrush)
Bird	Icteria virens (Yellow-breasted Chat)
Bird	Icterus spurius (Orchard Oriole)
Bird	Ictinia mississippiensis (Mississippi Kite)
Bird	Ixobrychus exilis (Least Bittern)
Bird	Lanius ludovicianus (Loggerhead Shrike)
Bird	Limnothlypis swainsonii (Swainson's Warbler)
Bird	Limosa haemastica (Hudsonian Godwit)
Bird	Melanerpes erythrocephalus (Red-headed Woodpecker)
Bird	Nycticorax nycticorax (Black-crowned Night-heron)
Bird	Parkesia motacilla (Louisiana Waterthrush)

	TENNESSEE RIVER COA GCN SPECIES (TN)
Taxa group	Scientific & Common names
Bird	Peucaea aestivalis (Bachman's Sparrow)
Bird	Pluvialis dominica (American Golden Plover)
Bird	Protonotaria citrea (Prothonotary Warbler)
Bird	Rallus elegans (King Rail)
Bird	Riparia riparia (Bank Swallow)
Bird	Scolopax minor (American Woodcock)
Bird	Setophaga cerulea (Cerulean Warbler)
Bird	Setophaga discolor (Prairie Warbler)
Bird	Setophaga fusca (Blackburnian Warbler)
Bird	Sitta pusilla (Brown-headed Nuthatch)
Bird	Sturnella magna (Eastern Meadowlark)
Bird	Thryomanes bewickii (Bewick's Wren)
Bird	Tryngites subruficollis (Buff-breasted Sandpiper)
Bird	Tyto alba (Barn Owl)
Bird	Vermivora chrysoptera (Golden-winged Warbler)
Bird	Vermivora cyanoptera (Blue-winged Warbler)
Bird	Vireo bellii (Bell's Vireo)
Bivalve	Cumberlandia monodonta (Spectaclecase)
Bivalve	Cyprogenia stegaria (Fanshell)
Bivalve	Lampsilis abrupta (Pink Mucket)
Bivalve	Ligumia recta (Black Sandshell)
Bivalve	Obovaria retusa (Ring Pink)
Bivalve	Plethobasus cooperianus (Orangefoot Pimpleback)
Bivalve	Plethobasus cyphyus (Sheepnose)
Bivalve	Pleurobema clava (Clubshell)
Bivalve	Pleurobema cordatum (Ohio Pigtoe)
Bivalve	Pleurobema plenum (Rough Pigtoe)
Bivalve	Pleurobema rubrum (Pyramid Pigtoe)
Bivalve	Pleuronaia barnesiana (Tennessee Pigtoe)
Bivalve	Pleuronaia dolabelloides (Slabside Pearlymussel)
Bivalve	Quadrula cylindrica cylindrica (Rabbitsfoot)
Bivalve	Simpsonaias ambigua (Salamander Mussel)
Crustacean	Orconectes alabamensis (Alabama Crayfish)
Crustacean	Orconectes wrighti (Hardin Crayfish)
Fish	Acipenser fulvescens (Lake Sturgeon)
Fish	Atractosteus spatula (Alligator Gar)
Fish	Carpiodes velifer (Highfin Carpsucker)
Fish	Cycleptus elongatus (Blue sucker)
Fish	Erimystax dissimilis (Streamline Chub)
Fish	Erimystax insignis (Blotched Chub)
Fish	Etheostoma aquali (Coppercheek Darter)
Fish	Etheostoma denoncourti (Golden Darter)
Fish	Etheostoma neopterum (Lollypop Darter)
Fish	Etheostoma pseudovulatum (Egg-mimic Darter)
Fish	Etheostoma pyrrhogaster (Firebelly Darter)
Fish	Fundulus chrysotus (Golden Topminnow)
Fish	Hemitremia flammea (Flame Chub)
Fish	Ichthyomyzon gagei (Southern Brook Lamprey)
Fish	Notropis rubellus (Rosyface Shiner)
Fish	Noturus fasciatus (Saddled Madtom)
Fish	Noturus gladiator (Piebald Madtom)
Fish	Noturus stanauli (Pygmy Madtom)
Fish	Percina burtoni (Blotchside Logperch)

	TENNESSEE RIVER COA GCN SPECIES (TN)
Taxa group	**Scientific & Common names**
Fish	Percina phoxocephala (Slenderhead Darter)
Gastropod	Vertigo teskeyae (Swamp Vertigo)
Insect	Ophiogomphus acuminatus (Acuminate Snaketail)
Mammal	Neotoma magister (Allegheny Woodrat)
Mammal	Ochrotomys nuttalli (Golden Mouse)
Mammal	Sorex cinereus (Cinereus Shrew)
Mammal	Sorex longirostris (Southeastern Shrew)
Mammal	Zapus hudsonius (Meadow Jumping Mouse)
Plant	Apios priceana (Price's Potato-bean)
Plant	Boechera shortii (Short’s Rock-cress)
Plant	Bolboschoenus fluviatilis (River Bulrush)
Plant	Cimicifuga rubifolia (Appalachian Bugbane)
Plant	Cypripedium kentuckiense (Southern Lady's-slipper)
Plant	Desmodium ochroleucum (Creamflower Tick-trefoil)
Plant	Echinochloa walteri (Walter's Barnyard Grass)
Plant	Erythronium rostratum (Beaked Trout-lily)
Plant	Fuirena squarrosa (Hairy Umbrella-sedge)
Plant	Hasteola suaveolens (Sweet-scented Indian-plantain)
Plant	Heteranthera limosa (Blue Mud-plantain)
Plant	Hottonia inflata (Featherfoil)
Plant	Juglans cinerea (Butternut)
Plant	Lilium michiganense (Michigan Lily)
Plant	Liparis loeselii (Fen Orchid)
Plant	Lysimachia fraseri (Fraser's Loosestrife)
Plant	Packera plattensis (Prairie Ragwort)
Plant	Panax quinquefolius (American Ginseng)
Plant	Polygala mariana (Maryland Milkwort)
Plant	Prenanthes aspera (Rough Rattlesnake-root)
Plant	Ranunculus flabellaris (Yellow Water-crowfoot)
Plant	Ribes odoratum (Buffalo Currant)
Plant	Sagittaria brevirostra (Short-beaked Arrowhead)
Plant	Solidago rupestris (Rock Goldenrod)
Plant	Spiranthes odorata (Sweetscent Ladies'-tresses)
Plant	Symphyotrichum pratense (Barrens Silky Aster)
Plant	Symplocos tinctoria (Horse-sugar)
Reptile	Anolis carolinensis (Green Anole)
Reptile	Anolis carolinensis (Green Anole)
Reptile	Apalone mutica (Smooth Softshell Turtle)
Reptile	Crotalus horridus (Timber Rattlesnake)
Reptile	Heterodon platirhinos (Eastern Hognosed Snake)
Reptile	Macrochelys temminckii (Alligator Snapping Turtle)
Reptile	Ophisaurus attenuatus longicaudus (Eastern Slender Glass Lizard)
Reptile	Pituophis melanoleucus melanoleucus (Northern Pinesnake)
Reptile	Sistrurus miliarius streckeri (Western Pygmy Rattlesnake)
Reptile	Terrapene carolina (Eastern Box Turtle)
Reptile	Virginia striatula (Rough Earth Snake)
Subterranean - Arachnid	Calymmaria persica (Cave-loving funnel-web spider)
Subterranean - Arachnid	Hesperochernes mirabilis (Southeastern Cave Pseudoscorpion)
Subterranean - Arachnid	Liocranoides gertschi (Gertsch’s tengellid spider)
Subterranean - Arachnid	Phanetta subterranea (Subterranean sheet-web spider)
Subterranean - Crustacean	Caecidotea bicrenata ((a cave obligate isopod))
Subterranean - Crustacean	Caecidotea bicrenata bicrenata ((a cave obligate isopod))
Subterranean - Crustacean	Cambarus tenebrosus (Cavespring Crayfish)

	TENNESSEE RIVER COA GCN SPECIES (TN)
Taxa group	**Scientific & Common names**
Subterranean - Crustacean	Crangonyx antennatus (Appalachian cave amphipod)
Subterranean - Crustacean	Orconectes pellucidus (Mammoth Cave Crayfish)
Subterranean - Crustacean	Pseudocandona jeanneli (Jeannel's Cave Ostracod)
Subterranean - Crustacean	Stygobromus exilis (Central Kentucky Cave Obligate)
Subterranean - Fish	Typhlichthys subterraneus (Southern Cavefish)
Subterranean - Insect	Aleochara lucifuga ((a rove beetle))
Subterranean - Insect	Atheta annexa ((a rove beetle))
Subterranean - Insect	Atheta troglophila ((a troglophilic rove beetle))
Subterranean - Insect	Batriasymmodes quisnamus ((a cave obligate beetle))
Subterranean - Insect	Batrisodes sp. (ant beetles)
Subterranean - Insect	Ceuthophilus sp. (cave crickets)
Subterranean - Insect	Macrocera nobilis (fungus gnat)
Subterranean - Insect	Megaselia cavernicola (cave hump-backed fly)
Subterranean - Insect	Onychiurus reluctus (springtail)
Subterranean - Insect	Platynus tenuicollis (ground beetle)
Subterranean - Insect	Prionochaeta opaca (small carrion beetle)
Subterranean - Insect	Pseudanophthalmus ciliaris ciliaris ((a cave obligate beetle))
Subterranean - Insect	Pseudanophthalmus colemanensis (Coleman Cave Beetle)
Subterranean - Insect	Pseudanophthalmus hesperus ((a cave obligate beetle))
Subterranean - Insect	Pseudanophthalmus sp. (cave ground beetles)
Subterranean - Insect	Pseudosinella aera ((a cave obligate springtail))
Subterranean - Insect	Pseudosinella hirsuta (Hirsute Cave Springtail)
Subterranean - Insect	Sciara sp. (fungus gnats)
Subterranean - Insect	Sinella cavernarum ((a springtail))
Subterranean - Insect	Spelobia tenebrarum (Cave dung fly)
Subterranean - Insect	Tomocerus bidentatus (Two-toothed springtail)
Subterranean - Millipede	Cambala sp. (millipeds)
Subterranean - Millipede	Chaetaspis debilis ((a cave obligate millipede))
Subterranean - Millipede	Pseudotremia undescribed sp. (Shear’s cave milliped)
Subterranean - Millipede	Scoterpes hesperus ((a cave obligate millipede))
Subterranean - Millipede	Scoterpes undescribed sp. ((a cave milliped))
Subterranean - Roundworm	Cambarincola leptadenus ((a cave obligate roundworm))

TENNESSEE RIVER COA HABITATS (TN)	
Terrestrial Habitat Type	**Total acres of very high, high, and medium ranked habitat**
Natural habitats	
South-Central Interior Mesophytic Forest	269,025
Southern Interior Low Plateau Dry-Mesic Oak Forest	121,301
East Gulf Coastal Plain Northern Mesic Hardwood Slope Forest	52,499
East Gulf Coastal Plain Northern Dry Upland Hardwood Forest	43,063
East Gulf Coastal Plain Large River Floodplain Forest	29,208
South-Central Interior Large Floodplain	21,103
East Gulf Coastal Plain Small Stream and River Floodplain Forest	15,623
East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest	11,718
South-Central Interior Small Stream and Riparian	9,370
Southern Appalachian Low-Elevation Pine Forest	255
Central Interior Calcareous Cliff and Talus	6
East Gulf Coastal Plain Limestone Forest	5
Semi-natural habitats	
Pasture	29,418
Old Field / Successional	28,439
Cropland	21,944
Aquatic Habitat Type	**Total stream miles of very high, high, and medium ranked habitat**
Headwaters and Streams	193
Small River	57
Medium River	23
Large River	148