Foothills

Conservation Opportunity Area

The Foothills Conservation Opportunity Area (COA) consists of a variety of habitat types at a variety of distinct elevations. The COA is primarily forested and includes the Great Smoky Mountains National Park, which has a land base of more than 500,000 acres in Tennessee and North Carolina, nearly half of which is in Tennessee. The COA also contains the southern portion of the Cherokee National Forest, and another 12,000+ acres of this COA are also publicly owned. TWRA has also established a quail showcase area, and several other habitat management showcases located at various Wildlife Management Areas.

The majority of the large river habitat in the southwest portion of this COA has been altered by hydroelectric projects operated by private and federal agencies. There are opportunities to protect and enhance populations of Tennessee Dace in the small, headwater tributaries to the Little Tennessee River.

Home to several aquatic animals of state and federal concern, the Little River contains, for its size, one of the most diverse fish communities in the Southeast if not the country. Restoration efforts for federally listed species such as Spotfin Chub are ongoing in the Tellico River portion of this COA. The lower French Broad River below Douglas Dam is an important tailwater resource that provides habitat for the federally endangered Snail Darter, as well as a key focal area for Lake Sturgeon and Mollusk recovery efforts.

Public Lands within the COA

Cove Mountain, Foothills Wildlife Management Area (WMA), Forks of the River WMA, Fort Loudoun State Park, Great Smoky Mountains National Park (GSMNP), GSMNP & Foothills Parkway, Kyker Bottoms Refuge, Roundtop Mountain State Natural Area, South Cherokee National Forest, Tapoco, Tellico Lake WMA, Tuckahoe Creek State Scenic River, Whites Mill Refuge

Significant Private Lands within the COA

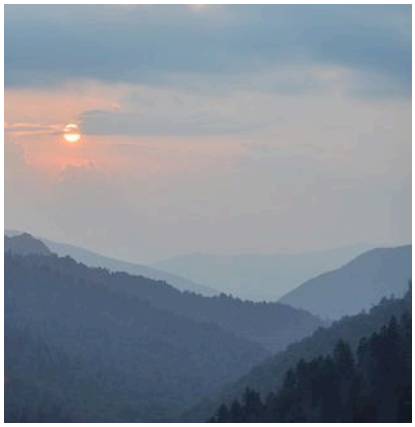
Brookfield Renewable Energy Partners hydroelectric facilities

This region is home to almost half of Great Smoky Mountains National Park and the Little River, which for its size contains one of the most diverse fish communities in the country.

Top to bottom: Male Striped Shiners feed on eggs from a Chub nest, Little River - Dave Hersimtschuk, Freshwaters Illustrated; Lake Sturgeon below Douglas Dam - Bart Carter, TWRA/ next page: Great Smoky Mountains NP - Greg Wathen, TWRA

Foothills
Conservation Opportunity Area

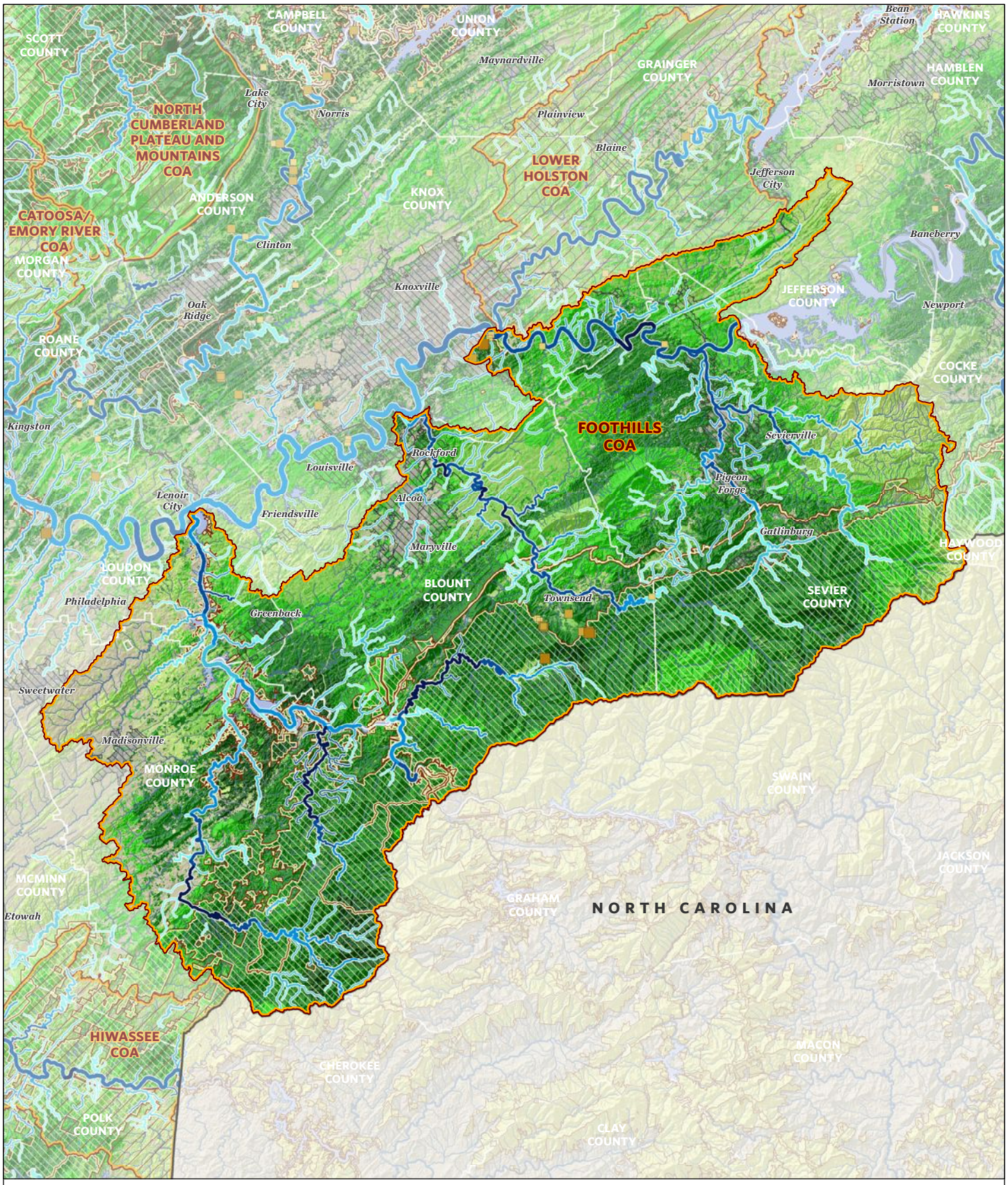
Partnerships



TWRA will continue to work with the US Forest Service, National Park Service, Tennessee Valley Authority, the Tennessee Aquarium, other state and federal agencies, The Nature Conservancy, Trout Unlimited, and other NGOs, Brookfield Renewable Energy Partners, private landowners, Tennessee Clean Water Network, Middle Tenn. State Univ., and other universities to implement strategies to protect and manage stream and forest habitats and eliminate Wild Hogs to benefit GCN species.

	Desired Change	Units
+	Increase the application of Best Management Practices to benefit GCN species and habitats on private lands using government funded incentive programs	number
+	Restore acres of appropriate natural ecological systems in or near critical habitat units.	acres
+	Restore degraded forests to appropriate natural ecological system.	acres
+	Increase acres of early successional habitat managed with prescribed fire in combination with clearing of vegetation.	acres
+	Restore acres or stream miles of habitat through natural process restoration .	acres/miles
+	Develop and implement integrated pest management plan to aid in the control of native and exotic pests.	acres
+	Improve knowledge of the geographical distribution of GCN species and/or habitat changes through scientific surveys.	projects
+	Increase acres of protected habitat through land purchase - whether fee title or easements - to link public lands; increase connectivity between habitats; or secure unique habitats/areas for restoration and management.	acres
−	Decrease the negative effects of development on GCN species and habitats by providing data to municipalities in planning/zoning processes with potential impacts on GCN species.	plans

To learn more about the Foothills Conservation Opportunity Area, please contact:
Scott Dykes, Wildlife Diversity Coordinator, Region 4 (423) 587-7037


SCOTT COUNTY
CAMPBELL COUNTY
UNION COUNTY
Bean Station
HAWKINS COUNTY
Maynardville
GRAINGER COUNTY
HAMBLEN COUNTY
Morristown
Lake City
Norris
NORTH CUMBERLAND PLATEAU AND MOUNTAINS COA
Plainview
Blaine
LOWER HOLSTON COA
Jefferson City
ANDERSON COUNTY
KNOX COUNTY
CATOOSA/ EMORY RIVER COA
MORGAN COUNTY
Clinton
Baneberry
Knoxville
JEFFERSON COUNTY
Newport
Oak Ridge
ROANE COUNTY
COCKE COUNTY
Kingston
FOOTHILLS COA
Sevierville
Rockford
Louisville
Pigeon Forge
Lenoir City
Alcoa
Friendsville
Gatlinburg
Maryville
HAYWOOD COUNTY
LOUDON COUNTY
BLOUNT COUNTY
SEVIER COUNTY
Philadelphia
Townsend
Greenback
Sweetwater
Madisonville
MONROE COUNTY
SWAIN COUNTY
JACKSON COUNTY
MCMINN COUNTY
GRAHAM COUNTY
NORTH CAROLINA
Etowah
HIWASSEE COA
MACON COUNTY
CHEROKEE COUNTY
POLK COUNTY
CLAY COUNTY
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.

	FOOTHILLS COA GCN SPECIES (TN)
Taxa Group	**Scientific & Common Names**
Amphibian	Cryptobranchus alleganiensis (Hellbender)
Amphibian	Desmognathus imitator (Imitator Salamander)
Amphibian	Eurycea junaluska (Junaluska Salamander)
Amphibian	Hemidactylium scutatum (Four-toed Salamander)
Amphibian	Necturus maculosus (Mudpuppy)
Amphibian	Plethodon aureolus (Tellico Salamander)
Amphibian	Plethodon jordani (Red-cheeked Salamander)
Amphibian	Pseudotriton montanus (Mud Salamander)
Bat	Corynorhinus rafinesquii (Rafinesque's Big-eared Bat)
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	Aegolius acadicus (Northern Saw-whet Owl)
Bird	Ammodramus henslowii (Henslow'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	Bonasa umbellus (Ruffed Grouse)
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	Certhia americana (Brown Creeper)
Bird	Chaetura pelagica (Chimney Swift)
Bird	Chordeiles minor (Common Nighthawk)
Bird	Circus cyaneus (Northern Harrier)
Bird	Cistothorus platensis (Sedge Wren)
Bird	Colinus virginianus (Northern Bobwhite)
Bird	Contopus cooperi (Olive-sided Flycatcher)
Bird	Empidonax alnorum (Alder Flycatcher)
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	Melanerpes erythrocephalus (Red-headed Woodpecker)

	FOOTHILLS COA GCN SPECIES (TN)
Taxa Group	**Scientific & Common Names**
Bird	Nycticorax nycticorax (Black-crowned Night-heron)
Bird	Parkesia motacilla (Louisiana Waterthrush)
Bird	Pluvialis dominica (American Golden Plover)
Bird	Poecile atricapillus (Black-capped Chickadee)
Bird	Protonotaria citrea (Prothonotary Warbler)
Bird	Riparia riparia (Bank Swallow)
Bird	Scolopax minor (American Woodcock)
Bird	Setophaga caerulescens (Black-throated Blue Warbler)
Bird	Setophaga cerulea (Cerulean Warbler)
Bird	Setophaga discolor (Prairie Warbler)
Bird	Setophaga dominica (Yellow-throated Warbler)
Bird	Setophaga fusca (Blackburnian Warbler)
Bird	Sitta pusilla (Brown-headed Nuthatch)
Bird	Sphyrapicus varius (Yellow-bellied Sapsucker)
Bird	Sturnella magna (Eastern Meadowlark)
Bird	Troglodytes troglodytes (Winter Wren)
Bird	Tyto alba (Barn Owl)
Bird	Tyto alba (Barn Owl)
Bird	Vermivora chrysoptera (Golden-winged Warbler)
Bird	Vermivora cyanoptera (Blue-winged Warbler)
Bivalve	Cyprogenia stegaria (Fanshell)
Bivalve	Dromus dromas (Dromedary Pearlymussel)
Bivalve	Epioblasma capsaeformis (Oyster Mussel)
Bivalve	Fusconaia cuneolus (Finerayed Pigtoe)
Bivalve	Fusconaia subrotunda (Longsolid)
Bivalve	Lampsilis abrupta (Pink Mucket)
Bivalve	Lasmigona complanata complanata (White Heelsplitter)
Bivalve	Lasmigona holstonia (Tennessee Heelsplitter)
Bivalve	Obovaria retusa (Ring Pink)
Bivalve	Plethobasus cooperianus (Orangefoot Pimpleback)
Bivalve	Plethobasus cyphyus (Sheepnose)
Bivalve	Pleurobema oviforme (Tennessee Clubshell)
Bivalve	Pleurobema plenum (Rough Pigtoe)
Bivalve	Quadrula cylindrica cylindrica (Rabbitsfoot)
Bivalve	Toxolasma lividum (Purple Lilliput)
Bivalve	Villosa iris (Rainbow)
Bivalve	Villosa vanuxemensis (Mountain Creekshell)
Crustacean	Orconectes forceps (Surgeon Crayfish)
Fish	Acipenser fulvescens (Lake Sturgeon)
Fish	Carpiodes velifer (Highfin Carpsucker)
Fish	Chrosomus tennesseensis (Tennessee Dace)
Fish	Clinostomus funduloides ssp. 1 (Smoky Dace)
Fish	Cycleptus elongatus (Blue sucker)
Fish	Erimonax monachus (Spotfin Chub)
Fish	Erimystax insignis (Blotched Chub)
Fish	Etheostoma cinereum (Ashy Darter)
Fish	Etheostoma gutselli (Tuckasegee Darter)
Fish	Etheostoma marmorpinnum (Marbled Darter)
Fish	Etheostoma percnurum (Duskytail Darter)
Fish	Etheostoma sitikuense (Citico Darter)
Fish	Etheostoma vulneratum (Wounded Darter)
Fish	Hemitremia flammea (Flame Chub)
Fish	Notropis rubellus (Rosyface Shiner)

	FOOTHILLS COA GCN SPECIES (TN)
Taxa Group	**Scientific & Common Names**
Fish	Noturus baileyi (Smoky Madtom)
Fish	Noturus flavipinnis (Yellowfin Madtom)
Fish	Percina aurantiaca (Tangerine Darter)
Fish	Percina burtoni (Blotchside Logperch)
Fish	Percina tanasi (Snail Darter)
Fish	Percina williamsi (Sickle Darter)
Fish	Salvelinus fontinalis (Brook Trout)
Gastropod	Euchemotrema fraternum montanum ((a pillsnail))
Gastropod	Fumonelix christyi (Glossy Covert)
Gastropod	Fumonelix wheatleyi (Cinnamon Covert)
Gastropod	Glyphyalinia pentadelphia (Pink Glyph)
Gastropod	Helicodiscus fimbriatus (Fringed Coil)
Gastropod	Inflectarius ferrissi (Smoky Mountain Covert)
Gastropod	Mesomphix rugeli (Wrinkled Button)
Gastropod	Paravitrea lamellidens (Lamellate Supercoil)
Gastropod	Paravitrea umbilicaris (Open Supercoil)
Gastropod	Stenotrema altispira (Highland Slitmouth)
Gastropod	Stenotrema magnafumosum (Appalachian Slitmouth)
Gastropod	Striatura exigua (Ribbed Striate)
Gastropod	Ventridens decussatus (Crossed Dome)
Gastropod	Vertigo clappi (Cupped Vertigo)
Insect	Allocapnia brooksi (Sevier Snowfly)
Insect	Speyeria diana (Diana Fritillary)
Mammal	Napaeozapus insignis (Woodland Jumping Mouse)
Mammal	Sorex cinereus (Cinereus Shrew)
Mammal	Sorex fumeus (Smoky Shrew)
Plant	Abies fraseri (Fraser Fir)
Plant	Acer leucoderme (Chalk Maple)
Plant	Adlumia fungosa (Climbing Fumitory)
Plant	Allium tricoccum (Ramps)
Plant	Aureolaria patula (Spreading False-foxglove)
Plant	Bazzania nudicaulis ((a liverwort))
Plant	Berberis canadensis (American Barberry)
Plant	Botrychium matricariifolium (Chamomile Grapefern)
Plant	Calamagrostis porteri (Porter's Reedgrass)
Plant	Cardamine rotundifolia (Round-leaf Watercress)
Plant	Carex comosa (Bristly Sedge)
Plant	Carex manhartii (Manhart's Sedge)
Plant	Carex ruthii (Ruth's Sedge)
Plant	Cimicifuga rubifolia (Appalachian Bugbane)
Plant	Clematis glaucophylla (White-leaved Leatherflower)
Plant	Cymophyllus fraserianus (Fraser's Sedge)
Plant	Draba ramosissima (Branching Whitlow-grass)
Plant	Drepanolejeunea appalachiana ((a liverwort))
Plant	Geum radiatum (Spreading Avens)
Plant	Heracleum maximum (Cow-parsnip)
Plant	Hydrophyllum virginianum (Appalachian Waterleaf)
Plant	Hymenophyllum tayloriae (Taylor's Filmy Fern)
Plant	Juglans cinerea (Butternut)
Plant	Krigia montana (False Dandelion)
Plant	Lathyrus palustris (Marsh Pea)
Plant	Lejeunea blomquistii (Blomquist Leafy Liverwort)
Plant	Lejeunea sharpii (Sharp's Lejeunea)

	FOOTHILLS COA GCN SPECIES (TN)
Taxa Group	**Scientific & Common Names**
Plant	Leptodontium viticulosoides var. sulphureum (Grandfather Mountain Leptodontium)
Plant	Leptohymenium sharpii (Mount Leconte Moss)
Plant	Leptoscyphus cuneifolius ((a liverwort))
Plant	Lilium canadense (Canada Lily)
Plant	Lophocolea appalachiana ((a liverwort))
Plant	Megaceros aenigmaticus (Megaceros)
Plant	Melanthium latifolium (Broadleaf Bunchflower)
Plant	Mnium carolinianum (Carolina Mnium)
Plant	Monotropsis odorata (Sweet Pinesap)
Plant	Panax quinquefolius (American Ginseng)
Plant	Pellia appalachiana ((a liverwort))
Plant	Plagiochila exigua ((a liverwort))
Plant	Porella wataugensis (Watauga Porella)
Plant	Prunus virginiana (Choke Cherry)
Plant	Silene ovata (Ovate Catchfly)
Plant	Sphenolobopsis pearsoni (Sphenolobopsis)
Plant	Spiraea virginiana (Virginia Spiraea)
Plant	Stachys clingmanii (Clingman's Hedge-nettle)
Plant	Streptopus roseus (Rosy Twisted-stalk)
Plant	Symplocos tinctoria (Horse-sugar)
Plant	Thermopsis fraxinifolia (Ash-leaved Bush-pea)
Plant	Tortula ammonsiana (Ammons's Tortula)
Plant	Trichomanes boschianum (Bristle-fern)
Plant	Trichomanes petersii (Dwarf Filmy-fern)
Plant	Trifolium reflexum (Buffalo Clover)
Plant	Xerophyllum asphodeloides (Eastern Turkeybeard)
Reptile	Anolis carolinensis (Green Anole)
Reptile	Crotalus horridus (Timber Rattlesnake)
Reptile	Terrapene carolina (Eastern Box Turtle)
Subterranean - Amphibian	Gyrinophilus gulolineatus (Berry Cave Salamander)
Subterranean - Amphibian	Gyrinophilus palleucus (Tennessee Cave Salamander)
Subterranean - Arachnid	Nesticus barri ((a cave obligate spider))
Subterranean - Arachnid	Nesticus barrowsi ((a cave obligate spider))
Subterranean - Arachnid	Oreonetides sp. (cave sheet-web spiders)
Subterranean - Arachnid	Phanetta subterranea (Subterranean sheet-web spider)
Subterranean - Crustacean	Amerigoniscus nicholasi ((a cave obligate isopod))
Subterranean - Crustacean	Caecidotea incurva (Incurved Cave Isopod)
Subterranean - Crustacean	Caecidotea sp. (cave isopods)
Subterranean - Crustacean	Crangonyx antennatus (Appalachian cave amphipod)
Subterranean - Crustacean	Stygobromus fecundus ((a cave obligate amphipod))
Subterranean - Crustacean	Stygobromus sparsus ((a cave obligate amphipod))
Subterranean - Millipede	Scoterpes blountensis ((a cave obligate millipede))

FOOTHILLS COA HABITATS (TN)	
Terrestrial Habitat Type	**Total acres of very high, high, and medium ranked habitat**
Natural habitats	
Southern Appalachian Oak Forest	278925
Southern Appalachian Low-Elevation Pine Forest	95001
Southern Ridge and Valley / Cumberland Dry Calcareous Forest	87367
Southern and Central Appalachian Cove Forest	52660
South-Central Interior Mesophytic Forest	39464
Appalachian (Hemlock)-Northern Hardwood Forest	39153
Allegheny-Cumberland Dry Oak Forest and Woodland	33937
South-Central Interior Small Stream and Riparian	15738
Southern Appalachian Northern Hardwood Forest	8980
Central and Southern Appalachian Spruce-Fir Forest	5539
Southern Appalachian Montane Pine Forest and Woodland	5053
South-Central Interior Large Floodplain	1931
Southern Appalachian Grass and Shrub Bald	421
Southern Appalachian Montane Cliff and Talus	214
Southern Appalachian Rocky Summit	165
Semi-natural habitats	
Pasture	89854
Old Field / Successional	22215
Cropland	6902
Aquatic Habitat Type	**Total stream miles of very high, high, and medium ranked habitat**
Headwaters & Streams	207
Small River	139
Medium River	64
Large River	1