

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

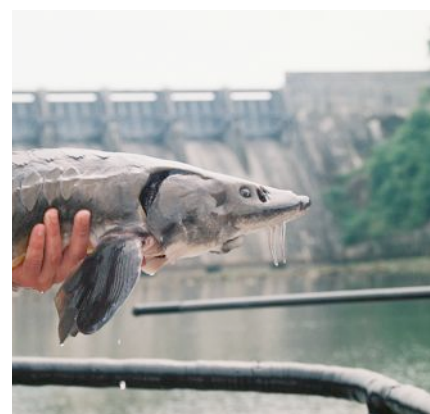
Cove Mountain, Foothills Wildlife Management Area (WMA), Forks of the River WMA, Fort Loudoun State Park, Great Smoky Mountains National Park (GSMNP), GSMNP & Foothills Parkway, Kyker Bottoms Refuge, Roundtop Mountain State Natural Area, South Cherokee National Forest, Tapoco, Tellico Lake WMA, Tuckahoe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

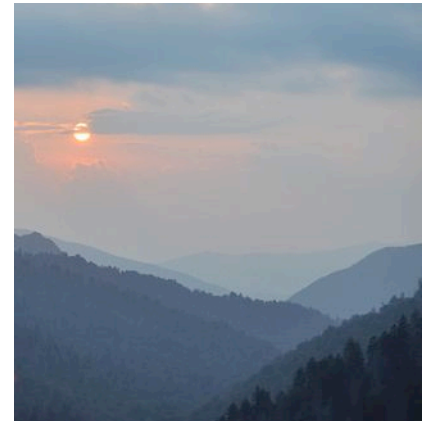


Top to bottom: Male Striped Shiners feed on eggs from a Chub nest, Little River - Dave Hersimtschuk, Freshwaters Illustrated; Lake Sturgeon below Douglas Dam - Bart Carter, TWRA/next page: Great Smoky Mountains NP - Greg Wathen, TWRA

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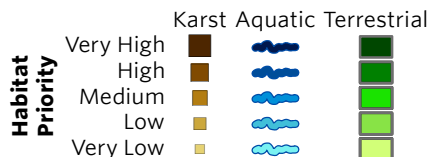
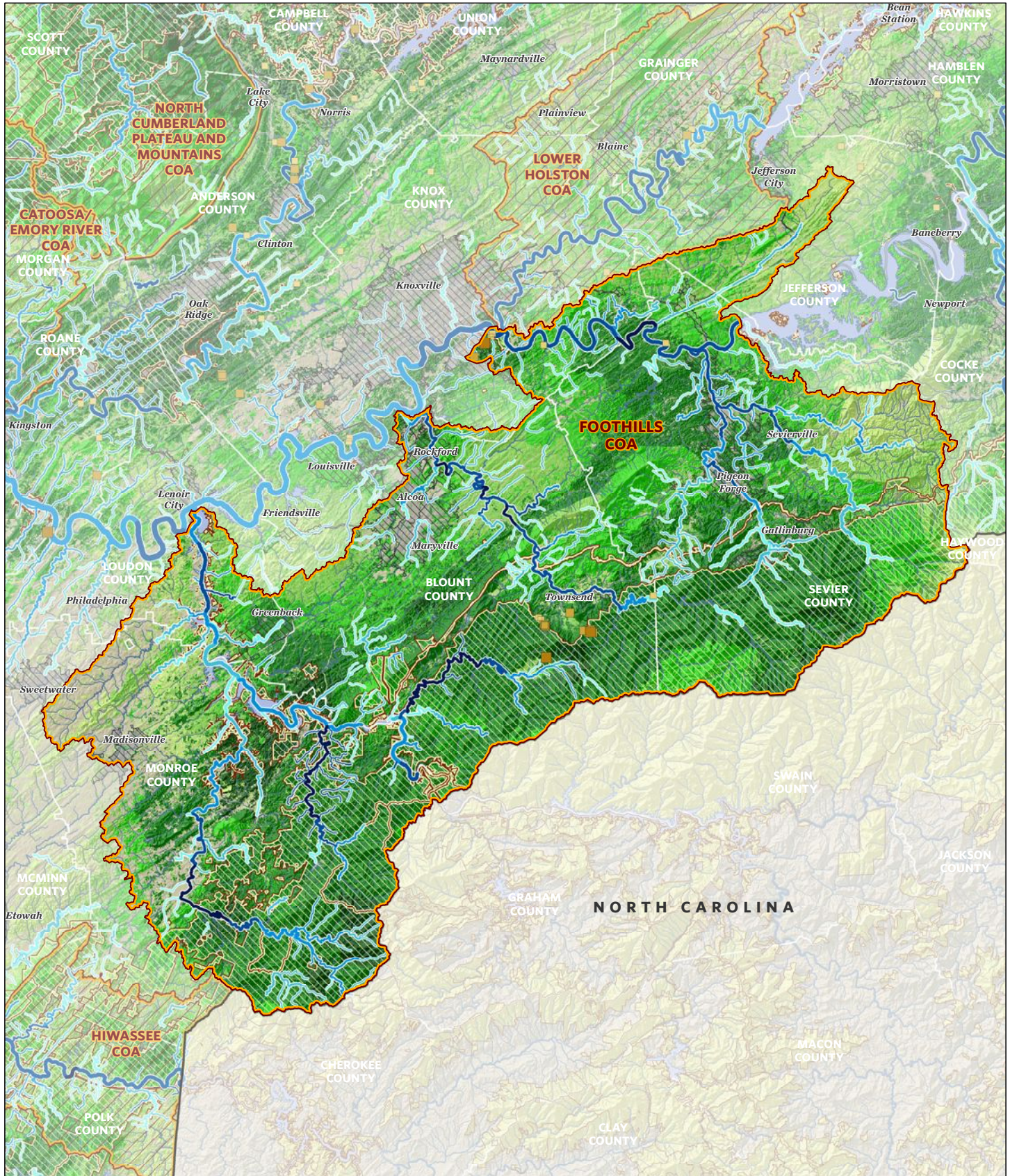
Partnerships

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



Conservation Opportunity Area
 Protected Land



The Nature Conservancy
 Protecting nature. Preserving life.

FOOTHILLS COA GCN SPECIES (TN)	
Taxa Group	Scientific & Common Names
Amphibian	<i>Cryptobranchus alleganiensis</i> (Hellbender)
Amphibian	<i>Desmognathus imitator</i> (Imitator Salamander)
Amphibian	<i>Eurycea junaluska</i> (Junaluska Salamander)
Amphibian	<i>Hemidactylium scutatum</i> (Four-toed Salamander)
Amphibian	<i>Necturus maculosus</i> (Mudpuppy)
Amphibian	<i>Plethodon aureolus</i> (Tellico Salamander)
Amphibian	<i>Plethodon jordani</i> (Red-cheeked Salamander)
Amphibian	<i>Pseudotriton montanus</i> (Mud Salamander)
Bat	<i>Corynorhinus rafinesquii</i> (Rafinesque's Big-eared Bat)
Bat	<i>Myotis grisescens</i> (Gray Bat)
Bat	<i>Myotis leibii</i> (Eastern Small-footed Bat)
Bat	<i>Myotis lucifugus</i> (Little Brown Bat)
Bat	<i>Myotis septentrionalis</i> (Northern Myotis)
Bat	<i>Myotis sodalis</i> (Indiana Bat)
Bat	<i>Perimyotis subflavus</i> (Tri-colored Bat)
Bird	<i>Accipiter striatus</i> (Sharp-shinned Hawk)
Bird	<i>Aegolius acadicus</i> (Northern Saw-whet Owl)
Bird	<i>Ammodramus henslowii</i> (Henslow's Sparrow)
Bird	<i>Ammodramus savannarum</i> (Grasshopper Sparrow)
Bird	<i>Anas rubripes</i> (American Black Duck)
Bird	<i>Aquila chrysaetos</i> (Golden Eagle)
Bird	<i>Asio flammeus</i> (Short-eared Owl)
Bird	<i>Bartramia longicauda</i> (Upland Sandpiper)
Bird	<i>Bonasa umbellus</i> (Ruffed Grouse)
Bird	<i>Calidris mauri</i> (Western Sandpiper)
Bird	<i>Calidris pusilla</i> (Semipalmated Sandpiper)
Bird	<i>Caprimulgus carolinensis</i> (Chuck-will's-widow)
Bird	<i>Caprimulgus vociferus</i> (Whip-poor-will)
Bird	<i>Cardellina canadensis</i> (Canada Warbler)
Bird	<i>Certhia americana</i> (Brown Creeper)
Bird	<i>Chaetura pelagica</i> (Chimney Swift)
Bird	<i>Chordeiles minor</i> (Common Nighthawk)
Bird	<i>Circus cyaneus</i> (Northern Harrier)
Bird	<i>Cistothorus platensis</i> (Sedge Wren)
Bird	<i>Colinus virginianus</i> (Northern Bobwhite)
Bird	<i>Contopus cooperi</i> (Olive-sided Flycatcher)
Bird	<i>Empidonax alnorum</i> (Alder Flycatcher)
Bird	<i>Empidonax minimus</i> (Least Flycatcher)
Bird	<i>Empidonax traillii</i> (Willow Flycatcher)
Bird	<i>Euphagus carolinus</i> (Rusty Blackbird)
Bird	<i>Falco peregrinus</i> (Peregrine Falcon)
Bird	<i>Geothlypis formosa</i> (Kentucky Warbler)
Bird	<i>Grus americana</i> (Whooping Crane)
Bird	<i>Haliaeetus leucocephalus</i> (Bald Eagle)
Bird	<i>Helmitheros vermivorum</i> (Worm-eating Warbler)
Bird	<i>Hylocichla mustelina</i> (Wood Thrush)
Bird	<i>Icteria virens</i> (Yellow-breasted Chat)
Bird	<i>Icterus spurius</i> (Orchard Oriole)
Bird	<i>Ictinia mississippiensis</i> (Mississippi Kite)
Bird	<i>Ixobrychus exilis</i> (Least Bittern)
Bird	<i>Lanius ludovicianus</i> (Loggerhead Shrike)
Bird	<i>Limnothlypis swainsonii</i> (Swainson's Warbler)
Bird	<i>Melanerpes erythrocephalus</i> (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 caerulea (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 cyphus (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	Carpionox 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)

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

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Taxa Group	Scientific & Common Names
Plant	Leptodontium viticulosoides var. sulphureum (Grandfather Mountain Leptodontium)
Plant	Leptohyemium 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	Monotropis 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	
Headwaters & Streams	207
Small River	139
Medium River	64
Large River	1