

A Guide to the Rare Animals of Tennessee



Photo courtesy Dr. Ken Catania

Star-nosed Mole, *Condylura cristata*, In Need of Management



Division of Natural Areas, Tennessee Department of Environment & Conservation

Tennessee Natural Heritage Program

Rare Animals List

September 2016



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NATURAL HERITAGE RESOURCES OF TENNESSEE:
RARE ANIMAL SPECIES
September 2016

INTRODUCTION

The Tennessee Department of Environment and Conservation's Division of Natural Areas (DNA) is dedicated to restoration and protection of plants, animals, and natural communities that represent the natural biological diversity of Tennessee. The DNA seeks to conserve our state's natural environments by identifying and protecting significant natural communities and rare species, and by promoting understanding and application of ecological principles. Within the DNA the Tennessee Natural Heritage Program's (TNHP) responsibilities include five focal areas:

- Identification of sites for inclusion in the State Natural Areas Program or other land conservation initiatives
- Regulation of the state's ginseng trade
- Field surveys for certain federally listed species, especially plants
- Environmental reviews for public agencies and non-governmental organizations
- Location, identification, and documentation of rare plants¹ and animals in Tennessee

The TNHP was established in 1974 with the assistance and direction of The Nature Conservancy (TNC), and was one of the first state Natural Heritage programs in the U.S. The TNHP relies on the use of computerized databases to record and report important information regarding the state's rare, threatened, and endangered plants, animals, and natural communities. In 2001, the data management arm of TNC was reorganized as a separate entity, NatureServe, which continues to provide centralized support to heritage programs, and coordinates the greater Natural Heritage Network, of which the TNHP is a member.

Lists produced from the program's [Biotics](#) database help to accomplish the goals of conservation and protection of rare species. Federal, state, and private agencies, organizations, and individuals use species lists produced by the TNHP in their environmental review processes. In this edition, 525 invertebrate and 187 vertebrate species are actively tracked, meaning that the TNHP has electronic occurrence information for these organisms, or that the program intends to acquire such data. Additionally, the TNHP maintains 186 invertebrates and 64 vertebrates on a watch list- species for which information is accumulated passively and not presented in Biotics or online TDEC resources. Some of these animals may warrant active tracking at a later time. Species on the watch list include possibly extirpated animals, formerly tracked species determined to

¹ T.C.A. 70-8-301 through 70-8-314, [Rare Plant Protection and Conservation Act of 1985](#)

be more abundant than originally speculated, and certain obscure species for which too little information exists to warrant active tracking.

If you do not have a list that has been revised in the past year, please visit our [website](#) to download the latest version. **Note that legal federal and/or state status may change before succeeding editions of this list.**

We encourage knowledgeable individuals to assist the TNHP staff in determining accurate rare animal list contents and ranking information. Please submit comments and justification to david.withers@tn.gov for consideration. Your assistance is appreciated.

The legally defined federal and state status is indicated for each species on this list. Federally listed species are protected by the Endangered Species Act of 1973, as amended. The U.S. Fish and Wildlife Service (FWS) administers the act and assigns federal status designations to species that are threatened with extinction (endangered) and those which may become endangered in the foreseeable future (threatened). The state status of vertebrates and certain invertebrates (mollusks & crustaceans) is determined by the Tennessee Wildlife Resources Agency (TWRA)². Generally, the TWRA designation will be at the same level (or higher) as the federal status. However, many species may be listed by the TWRA that do not have a federal status at present. Likewise, some federal species (including insects and arachnids) are not listed by the TWRA. Many rare invertebrates are not currently afforded state or federal protection, but are tracked by the TNHP.

Those species presented in the TNHP list with neither a state nor federal designation are considered rare based on available information. Data are collected on these species in order to minimize the necessity of their listing as endangered or threatened. Inclusion of unlisted species is for information only and is not intended to imply a legal obligation to protect them beyond that afforded by relevant state or federal regulations.

The nominations of new species or revision of statuses for currently listed species may change for the following reasons:

- New information about the distribution of the species in Tennessee and/or throughout its range
- Changes in the number of known populations in Tennessee
- Viability of these populations
- Habitat specificity
- Known or perceived threats to the species and its habitats
- Number of protected populations

² T.C.A. 70-1-101(41) and 70-8-101 through 70-8-112, [Tennessee Nongame and Endangered or Threatened Wildlife Species Conservation Act of 1974](#)

- Difficulty of adequately protecting or managing habitats for the species' survival
- Biological factors which influence their ability to reproduce or respond to disturbance
- Dependence on other species that also may be in jeopardy

Status and ranking are subject to change during the year, so periodically check our website to make certain you have the most recent information. Additional detail about species listed by the TWRA and FWS may be found at <http://www.tn.gov/twra/topic/species-list> and www.fws.gov/endangered/ respectively.

Rationale

Tennessee is one of the most biodiverse states in the nation, boasting over 300 species of fish, at least 80 mammal and 60 reptile species, approximately 70 different amphibians (including over 40 salamander species), and over 340 species of birds.

The invertebrates are no less impressive, with over 225 kinds of land snails, 100 aquatic snail species, at least 120 mussel and 80 crayfish species, and thousands of insects. Many of our rarer species are invertebrates, and some cave specialists (such as certain beetles, springtails, & pseudoscorpions) may be limited to just one or a very few sites.

With so many species, subspecies, and forms, and in part thanks to our geography, geology, and climate, the number of habitat specialists is remarkable. Endemism is high, with at least 90 animal species known only from Tennessee. Many other species exist on the periphery of their range in Tennessee (where evolutionary processes may act most quickly) or may range little outside of Tennessee.

It is the hope of the TNHP that this list provides not only the nuts and bolts (the legal statuses) of rare species, but also that it instructs the reader as to the great diversity we all have inherited. Truly, its remarkable biodiversity makes Tennessee an outstanding state in which to live.

List Structure

Species included in this list are presented by major taxonomic grouping, then alphabetically by scientific name, and contain the following fields: scientific name, taxonomic authority, common (vernacular) name if assigned, the physiographic regions from which we have mapped records, habitat, federal status, state status, and global and state ranks (as assigned by NatureServe and TNHP, respectively).

Scientific Name

Within this list, each species' scientific name is generally that accepted by the [International Commission on Zoological Nomenclature](#) and recorded by NatureServe. The scientific name is followed by the taxonomic authority for the species. If the species has at some point been reassigned to a different genus, the name of the original authority appears in parentheses. Each scientific name is linked to the corresponding page in NatureServe *Explorer* where detailed species information may be found. The scientific name field includes a link to search for the species on the [NatureServe Explorer](#) website.

Common or Vernacular Name

It is a common misconception that vernacular names change more frequently than scientific names. That is not necessarily the case. What is true is that many more common names may exist simultaneously than the scientific parlance. This list presents common names generally adopted by the scientific community and presented in the corresponding authoritative publications. Many cave invertebrate species possess no assigned common names.

Physiographic Province

The physiographic provinces of Tennessee are presented graphically on page xii, following designations adapted from [The Geologic History of Tennessee: Department of Environment and Conservation, Division of Geology Bulletin 74](#) (R. A. Miller, 1974). From west to east they include the Mississippi Floodplain (MF), Coastal Plain (CP), West Tennessee Uplands (WU), Western Highland Rim (WR), Central Basin (CB), Eastern Highland Rim (EH), Cumberland Plateau (CU), Sequatchie Valley (SV), Cumberland Mountains (CM), Ridge & Valley (RV), and Blue Ridge Mountains (BR).

Habitat

General habitat requirements for each species are noted, including physiographic or watershed restrictions if known. As other habitats may exist for poorly studied or obscure species, these habitat comments may not describe every possible location for the species in question. More comprehensive habitat listings for each species may be found on the [NatureServe Explorer](#) website.

Federal Status

Federally listed animals are protected by the Endangered Species Act of 1973 (as amended), and the list is maintained by the FWS. In Tennessee, listing and recovery responsibilities are divided between a number of FWS offices. The FWS Cookeville Field Office has direct responsibility for a majority of these species. Please visit <https://www.fws.gov/cookeville/> for additional information about FWS activities in Tennessee.

Applicable federal statuses are defined as follows, based on nomenclature adopted by NatureServe and the TNHP:

LE	Listed Endangered	Threatened by extinction throughout all or a significant portion of its range
SAE	Endangered by Similarity of Appearance	Treated as an endangered species because it may not be easily distinguished from a listed species
LT	Listed Threatened	Likely to become an endangered species in the foreseeable future
SAT	Threatened by Similarity of Appearance	Treated as a threatened species because it may not be easily distinguished from a listed species
PE	Proposed Endangered	Proposed for listing as endangered
PT	Proposed Threatened	Proposed for listing as threatened
C	Candidate species ³	USFWS has sufficient information to support proposals to list the species as threatened or endangered, and for which the Service anticipates a listing proposal
(status, XN)	Nonessential experimental population in portion of range	Introduced or re-introduced in an area from which it has been extirpated, and for which certain provisions of the Act may not apply
PXN	Proposed nonessential experimental population	Proposed as a nonessential experimental population

(Modified from Federal Register, 50 CFR Part 17.11 {31 December 1999})

One matter of key import is the “XN” designation for “Nonessential experimental population.” This attribute for certain federal species indicates that the FWS is aware of at least one such population for that species in Tennessee. It does *not* mean that all known populations in Tennessee are considered “XN.” Please consult the FWS for guidance regarding specific sites and populations. FWS documentation refers to this status as “nonessential experimental population” (NEP). A live link to FWS information is provided for each federally listed species via its [Federal Status](#) listing.

³ Animals listed as candidates may be added to the list of Endangered and Threatened species, and as such, consideration wisely is given to them in environmental planning. Species listed as LE, LT, PE, and PT must be given consideration in environmental planning involving federal funds, lands, or permits, and consideration likewise is advisable for non-federal activities. For further information, please contact the Tennessee Field Office of the FWS, 446 Neal Street, Cookeville, TN 38501; (931) 528-6481.

State Status

In Tennessee, only vertebrates, mollusks and crustaceans may be formally listed by the TWRA as Endangered, Threatened, or “Deemed in Need of Management” ([T.C.A. 70-8-104](#), [70-8-105](#), [70-8-107](#)). This means that invertebrate groups including insects and arachnids cannot be listed by the TWRA, but may be listed by the FWS.

E	Endangered	Any species or subspecies of wildlife whose prospects of survival or recruitment within the state are in jeopardy or are likely to become so within the foreseeable future
T	Threatened	Any species or subspecies of wildlife that is likely to become an endangered species within the foreseeable future
D	In Need of Management	Any species or subspecies of wildlife that needs specific management to prevent it from becoming a threatened species within the state in the foreseeable future

A TWRA Nongame Primer may be found here:

https://admincms.tn.gov/assets/entities/environment/attachments/na_twra-nongame-primer.pdf

State Wildlife Action Plan

In 2005, TWRA and TNC developed the first State Wildlife Action Plan (SWAP) for Tennessee, from which was produced a detailed list of species of Greatest Conservation Need (GCN). The original SWAP was comprehensively updated in 2015. Recognizing the role the TWRA plays in the conservation of habitats- including those containing species that cannot be listed legally at the state level- the SWAP includes numerous insects, arachnids, millipedes, and other invertebrates not legally defined as wildlife. Details about the 2015 SWAP and GCN species may be found at www.tnswap.com. Numerous GCN species are represented in the current rare animals list.

Global and State Ranks

As a guide in setting conservation priorities, TNC developed a ranking system for estimating the abundance of plants and animals tracked by Natural Heritage programs. The Global Rank ([GRANK](#)) is assigned by NatureServe Central Zoology staff based on the best range-wide (global) abundance information for each species. A five-tier system (G1-G5) is used to describe rarity, from G1 (extremely rare) to G5 (widespread). The same system is applied by the TNHP to assign the State Rank (SRANK), which describes the species’ abundance within our state’s borders. Numerous land management agencies, including the Cherokee National Forest, use GRANK to help determine sensitive species that occur on their properties.

SRANK and GRANK are based primarily upon the number of occurrences of the element (species) within the state and range-wide, respectively. For obscure or under-studied species, ranks are based on the best available information, and consideration may be given to other factors influencing the rarity of each species, including threats, abundance, population trends, and distribution.

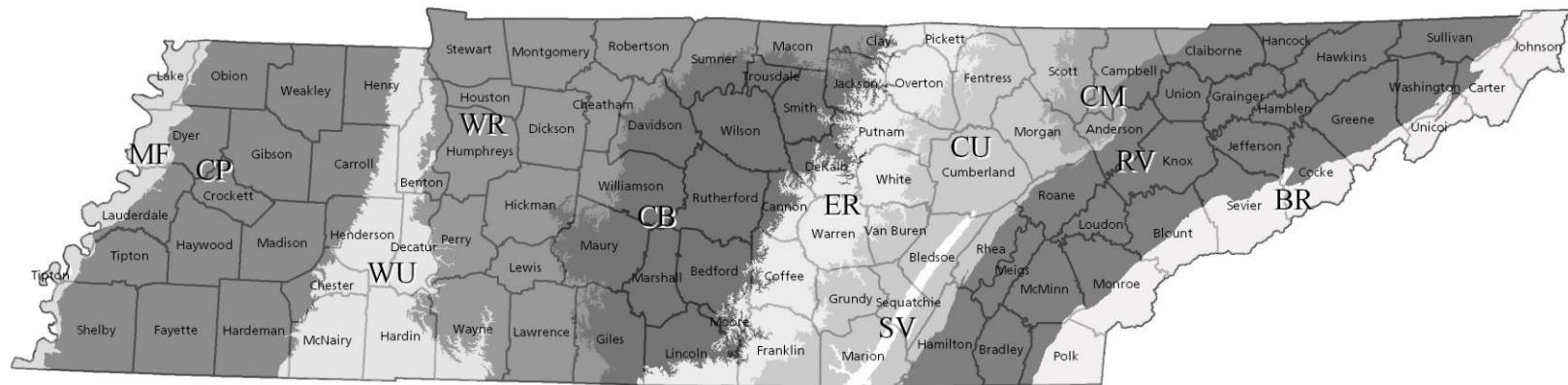
SRANKs used in this list are defined below. GRANKs are similarly defined, except that ranking criteria apply range-wide (e.g. an S1 species is “critically imperiled” in the state, and a G1 species is “critically imperiled” range-wide).

S1	Critically Imperiled —Critically imperiled in Tennessee because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from Tennessee.
S2	Imperiled —Imperiled in Tennessee because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation.
S3	Vulnerable —Vulnerable in Tennessee due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	Apparently Secure —Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5	Secure —Common, widespread, and abundant in Tennessee.
SH	Possibly Extirpated — Known only from historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in Tennessee, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in Tennessee.
SX	Presumed Extirpated —Species or ecosystem is believed to be extirpated from Tennessee. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
S#S#	Range Rank — A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).
S?, S_?	Range Rank — A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).
_N	Nonbreeding —Conservation status refers to the non-breeding population of the species in Tennessee (mostly applies to vertebrates).

_B	Breeding —Conservation status refers to the breeding population of the species in Tennessee (mostly applies to vertebrates).
_Q	Questionable taxonomy that may reduce conservation priority —(GRANKs only).
_T#	Infraspecific Taxonomic Unit (trinomial)—The status of a subspecies (GRANKs only).
_NR	Unranked — Conservation status not yet assessed.
_U	Unrankable —Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.

Updates to NatureServe Conservation Status and ranking methodology may be found on the [NatureServe](#) website.

Physiographic Provinces of Tennessee



MF	Mississippi Flood Plain	CU	Cumberland Plateau
CP	Coastal Plain	CM	Cumberland Mountains
WU	West Tennessee Uplands	SV	Squatchie Valley
WR	Western Highland Rim	RV	Ridge and Valley
CB	Central Basin	BR	Blue Ridge Mountains
ER	Eastern Highland Rim		

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Invertebrate Animal					
ARACHNIDA (SPIDERS & PSEUDOSCORPIONS)	Arachnids				
<u>Anthrobia mammouthia</u>	Tel I kampf, 1844			Mammoth Cave spider	
Terrestrial cave obligate; reported from a handful of caves in the middle Cumberlands; Blodsoe, Grundy, & Van Buren counties.	ER, SV			S1	G5
<u>Appaleptoneta sp. 1</u>			A Leptonetid Spider From Ghost River Cave		
Terrestrial cave obligate; reported from the northern Cumberlands.	ER			S1	G1
<u>Chitrella archeri</u>	Mal col m & Chamberlin, 1960		A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; associated with bat guano in caves of eastern middle Tennessee.	ER			S1S2	G1G2
<u>Cybaeopsis pantopla</u>	(Bi shop and Crosby, 1935)		An Amaurobiid Spider		
Terrestrial cave obligate; reported from northern Cumberlands.				S2	G3
<u>Fumontana deprehendor</u>	Shear, 1977		A Harvestman		
Within well-decayed hemlock logs, under rocks or leaf litter; rich woods with moderate slopes; southern Appalachians.				S1	G1G2
<u>Hesperochernes mirabilis</u>	(Banks, 1895)		Southeastern Cave Pseudoscorpion		
Terrestrial cave obligate; woodrat debris in caves; middle Tennessee.	ER, RV, SV, CU			S3	G5
<u>Kleptochthonius affinis</u>	Muchmore, 1976		A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Ridge & Valley.	RV			S1S2	G1G2
<u>Kleptochthonius barri</u>	Muchmore, 1965		A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; southern Cumberlands.	ER, CU			S1S2	G1G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
ARACHNIDA (SPIDERS & PSEUDOSCORPIONS)		Arachnids				
<u>Kleptochthonius charon</u>	Muchmore, 1965			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Sequatchie Valley.		SV, CU			S1S2	G1G2
<u>Kleptochthonius daemonius</u>	Muchmore, 1965			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Cumberland Plateau.		ER, CU			S1S2	G1G2
<u>Kleptochthonius infernalis</u>	Malcolm & Chamberlain, 1961			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Grassy Cove; Cumberland County.		CU			S1	G1
<u>Kleptochthonius magnus</u>	Muchmore, 1966			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; southern Cumberland.		CU			S1	G1
<u>Kleptochthonius myopius</u>	Malcolm & Chamberlain, 1961			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Eastern Highland Rim.		CB			S1	G1
<u>Kleptochthonius pluto</u>	Muchmore, 1965			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Eastern Highland Rim.		ER, CU			S1	G1
<u>Kleptochthonius rex</u>	Malcolm & Chamberlain, 1961			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Eastern Highland Rim.		ER			S1	G1
<u>Kleptochthonius stygius</u>	Muchmore, 1965			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; Eastern Highland Rim.		CB			S1	G1

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
ARACHNIDA (SPIDERS & PSEUDOSCORPIONS)		Arachnids				
<u>Kleptochthonius tantalus</u>	Muchmore, 1966			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; southern Cumberlands.		CU			S1	G1
<u>Liocranoides archeri</u>	Platnick, 1999			Archer's Two-clawed Spider		
Terrestrial cave obligate; reported from a handful of caves in mid and S Cumberlands; Franklin, Grundy, Marion, & Warren counties.					S2	G2
<u>Liocranoides tennesseensis</u>	Platnick, 1999			Tennessee Two-clawed Spider		
Terrestrial cave associate; reported from a handful of caves in mid and N Cumberlands; Cumberland, Putnam, & Warren counties.					S1	G1
<u>Microcreagris nickajackensis</u>	Muchmore, 1966			A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; known from only one cave in S Cumberlands; Marion County.					S1	G1G2
<u>Microhexura montivaga</u>	Crosby and Bishop, 1925			Spruce-fir Moss Spider		
Moss mats in high-elevation spruce-fir forests; Southern Appalachians.		BR			LE	S1
<u>Nesticus barri</u>	Gertsch, 1984			A Cave Obligate Spider		
Terrestrial cave obligate; southern Cumberlands; reported from Franklin & Marion counties.		CU			S3	G3
<u>Nesticus barrowsi</u>	Gertsch, 1984			A Cave Obligate Spider		
Terrestrial cave obligate; Appalachian Mountains.		BR			S1S2	G1G2
<u>Nesticus dilutus</u>	Gertsch, 1984			Grassy Creek Cave Spider		
Terrestrial cave obligate; Rhea County.		RV			S1	G1

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
ARACHNIDA (SPIDERS & PSEUDOSCORPIONS)	Arachnids					
<u>Nesticus furtivus</u>	Gertsch, 1984			Crystal Caverns Cave Spider	S1	G1
Terrestrial cave obligate; S Cumberl ands; Hamil ton County; known only from the type locality.		RV				
<u>Nesticus paynei</u>	Gertsch, 1984			A Cave Spider		
Terrestrial cave associate; also may be found on surface; northern Ridge & Valley.		RV, BR			S3	G3G4
<u>Nesticus pecki</u>	Hedlin and Delliinger, 2005			Monteagle Cave Spider		
Terrestrial cave associate and possibly obligate; known from one cave in S. Cumberl ands; Marion County.					S1	GNR
<u>Nesticus stygius</u>	Gertsch, 1984			A Cave Obligate Spider		
Terrestrial cave obligate; reported from wet caves; northern Cumberl ands.		ER, CU			S1S2	G1G2
<u>Nesticus tennesseensis</u>	(Petrunkevich, 1925)			Tennessee cave spider		
Terrestrial cave associate or possibly obligate; east Tennessee.		ER, RV			S2S4	G3G4
<u>Phalangodes appalachius</u>	(Goodnight and Goodnight, 1942)			A Cave Obligate Harvestman		
Terrestrial cave obligate; Cumberl and Plateau.		ER, CU			S3	G3G4
<u>Poecilophysis weyerensis</u>	(Packard)			A Cave Mite		
Terrestrial cave obligate; east Tennessee.					S2S3	G3?
<u>Porhomma cavernicola</u>	(Keyserling, 1886)			Appalachian Cave Spider		
Terrestrial cave obligate; eastern half of Tennessee; sporadic.		ER, CB, CU			S1?	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
ARACHNIDA (SPIDERS & PSEUDOSCORPIONS) <u>Theromaster sp. 1</u>	Arachnids		A Harvestman From Cummings Cove Cave		
Terrestrial cave associate; known from one cave in the Cumberland and Plateau; Van Buren County.	CU			S1	G1
<u>Tyannochthonius fiskei</u>	Muchmore, 1996		A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; reported from one cave in the Southern Cumberland and Franklin County.	CU			S1	G1
<u>Tyannochthonius halopotamus</u>	Muchmore, 1996		A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; known from one cave in the Southern Cumberland and Franklin County.				S1	G1
<u>Tyannochthonius steevesi</u>	Muchmore, 1996		A Cave Obligate Pseudoscorpion		
Terrestrial cave obligate; northernmost Eastern Highland Rim; known from one cave in Pickett County.	ER			S1	G1
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS) <u>Acanthocyclops parasensitivus</u>	Crustaceans				
Aquatic cave associate; reported from one cave in the Southern Cumberland and Grundy County.	J. W. Reid, 1997		A Copepod		
				S2	G2
<u>Amerigoniscus nicholasi</u>	(Vandel, 1965)		A Cave Obligate Isopod		
Terrestrial cave obligate; known from two caves; Western Highland and Ridge & Valley.	WR, RV			S1S2	G1G2
<u>Amerigoniscus paynei</u>	(Muchmore, 1970)		A Cave Obligate Isopod		
Terrestrial cave obligate; northern Ridge & Valley; Anderson, Hancock, & Union counties.				S1S2	G1G2
<u>Bactrurus angulus</u>	Koenemann and Holsinger, 2001		Cumberland Gap Cave Amphipod		
Aquatic cave obligate; Cumberland and Gap area.	RV			S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS)	Crustaceans				
<u>Barbicambarus cornutus</u>	(Faxon, 1884)			Bottle Brush Crayfish	
Under slab rock in medium-large tributaries of Barren River watershed; Sumner, Macon, Clay counties.		WR		S2	G4
<u>Barbicambarus simmonsi</u>	Taylor and Schuster, 2010			Tennessee Bottlebrush Crayfish	
Under slab rock in medium-large tributaries of Tennessee River; Shoal Creek watershed, Lawrence County. Reported from two locations in Tennessee.		WR		S2?	G1G2
<u>Caecidotea birenata whitei</u>	Lewis and Bowman, 1981			A Cave Obligate Isopod	
Aquatic cave obligate; middle Tennessee.				S1?	G3G4T3T
<u>Caecidotea circulus</u>	(Steeves, 1968)			A Cave Obligate Isopod	
Aquatic cave obligate; Cumberland Plateau.	SV, CU			S1	G1G2
<u>Caecidotea incurva</u>	(Steeves, 1968)			Incurved Cave Isopod	
Aquatic cave obligate; known from two wet caves in east Tennessee.	RV, BR			S1	G2G4
<u>Caecidotea nickajackensis</u>	(Cope and Packard, 1881)			Nickajack Cave Isopod	
Aquatic cave obligate; Nickajack Cave (historically); probably extirpated by impoundment.	CU			S1	GH
<u>Caecidotea nortoni</u>	(Steeves, 1966)			A Cave Obligate Isopod	
Aquatic cave obligate; eastern Ridge & Valley.	RV			S1S2	G2G3
<u>Caecidotea recurvata</u>	(Steeves, 1963)			Southwestern Virginia Cave Isopod	
Aquatic cave obligate; northernmost Ridge & Valley; reported from Campbell, Claiborne, & Hancock counties.				S2	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS) <u>Caecidotea scyphus</u>	Crustaceans (Steeves and Hol singer, 1968)			A Cave Obligate Isopod	
Aquatic cave obligate; Grassy Cove; Cumberland County.	CU			S1	G1G2
<u>Cambarus bouchardi</u>	Hobbs, 1970			Big South Fork Crayfish	
Small to medium sized streams under rock cover; Roaring Branch Creek & tributaries (Big South Fork watershed); tertiary burrower.	CM, CU	E		S1	G2
<u>Cambarus clivosus</u>	Taylor, Soucek, and Organ, 2006			Short Mountain Crayfish	
Occurs in spring- or seep-fed tributaries of Caney Fork & Stones rivers; escarpment of E High and Rim in Cannon & DeKalb counties.	ER, CB			S2	G2
<u>Cambarus conasaugaensis</u>	Hobbs and Hobbs III, 1962			Mountain Crayfish	
Mountain seeps & small to medium sized streams in Appalachians; Hiwassee River watershed, Polk County.	BR			S1	G3
<u>Cambarus cymatilis</u>	Hobbs, 1970			Conasauga Blue Burrower	
Primary burrower; seeps & wet grassy areas including homesites; Conasauga R watershed and adjacent portion of Hiwassee R basin.	RV	E		S1	G1
<u>Cambarus deweesae</u>	Bouchard and Ettinger, 1979			Valley Flame Crayfish	
Primary burrower; open areas with high water tables; northern Ridge & Valley.	RV, CM, CU	E		S1	G4
<u>Cambarus extraneus</u>	Hagen, 1870			Chickamauga Crayfish	
Springs & small to medium sized streams under rocks or in vegetation; South Chickamauga Creek watershed, Hamilton County.	RV	T		S1S2	G2
<u>Cambarus hamulatus</u>	(Cope, 1881)			Prickly Cave Crayfish	
Aquatic cave obligate; Sequatchie Valley & southern Cumberland.	SV, CU			S3	G3G4

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS)	Crustaceans					
<u>Cambarus hiwasseeensis</u>	Hobbs, 1981					Hiwassee Crayfish
Under rocks in clear, swift flowing tributaries of the upper Hiwassee River, Polk County.		BR			S1	G3G4
<u>Cambarus obeyensis</u>	Hobbs and Shoup, 1947					Obey Crayfish
Under cover in small-medium sized streams; headwaters of East Fork Obey River; northern Cumberland; tertiary burrower.		CU	T		S2	G1
<u>Cambarus pristinus</u>	Hobbs, 1965					Pristine Crayfish
Under cover in small-large size streams; headwaters of Caney Fork River & abutting Sequatchie River tributaries; Cumberland Plateau.		CU	E		S2	G2
<u>Cambarus sp. 1</u>						Emory River Crayfish
Under rock cover in Emory River & larger tributaries, Morgan County.		CU			S1	G1
<u>Cambarus stockeri</u>	Thoma, 2011					Cocoa Crayfish
Primary burrower; seeps & wet grassy areas incl homesites; Conasauga R watershed and adj Hiwassee R basin; Bradley County.		RV			S1S2	GNR
<u>Cambarus williami</u>	Bouchard and Bouchard, 1995					Brawleys Fork Crayfish
East Fork Stones River, its gravel-bottomed tributaries, and karst springs; makes short burrows in cobble; Cannon County.		ER, CB	E		S2	G2
<u>Dactylocythere steevesi</u>	(Hart and Hobbs 1961)					A Cave Obligate Shrimp
Aquatic cave obligate; crayfish commensal; Cumberland Plateau & Eastern Highland Rim generally.		ER, CU			S2S3	G4
<u>Diacyclops indianensis</u>	Reid, 2004					Indiana Groundwater Copepod
Aquatic cave obligate from stream gravels & flood pools; Highland escarpment to the Cumberland Plateau.					S1	G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS)	Crustaceans					
<u>Diacyclops yeastmani</u>	J. W. Reid, 1988			Yeatman's Groundwater Copepod		
Aquatic cave obligate; central & southern Cumberland generally; possibly part of a species complex.		ER, CU			S1	G2G3
<u>Donaldsoncythere tuberosa</u>	(Kline, 1931)			A Cave Obligate Shrimp		
Aquatic cave obligate; Eastern Highland Rim; Putnam & Overton counties; crayfish commensal.		ER			S2?	G2G3
<u>Fallicambarus hortoni</u>	Hobbs and Fitzpatrick, 1970			Hatchie Burrowing Crayfish		
Primary burrower; uses saturated or seasonally saturated soils associated with permanent bodies of water; Mississippi River tributaries, Coastal Plain.	CP, WU	E			S1	G1
<u>Ligidium elrodii hancockensis</u>	Schultz, 1970			A Cave Obligate Isopod		
Terrestrial cave obligate; in wet organic debris; northern Ridge & Valley.		RV			S1?	G4G5T1T ²
<u>Megacyclops donaldsoni</u>	(Chappuis, 1929)			A Copepod		
Aquatic cave obligate; known from one cave in S Cumberland; Grundy County.					S1	G3G4
<u>Miktoniscus barri</u>	Vandel, 1965			A Cave Obligate Isopod		
Terrestrial cave obligate from leaf litter; reported from Western Highland Rim & northern Cumberland; spotty distribution.	ER, WR				S2?	G2G4
<u>Orconectes alabamensis</u>	(Faxon, 1884)			Alabama Crayfish		
Small - medium sized streams, in pools under rocks; Tennessee River tributaries from Shoal Creek downstream to the Buffalo River.	WR, WU	D			S2	G5
<u>Orconectes australis</u>	(Rhoades, 1941)			Southern Cave Crayfish		
Aquatic cave obligate; subterranean streams & pools; Eastern Highland Rim escarpment to the Cumberland Plateau.	ER, CU				S3	G5

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS)	Crustaceans					
<u>Orconectes barri</u>	Buhay and Crandal I., 2008			Cumberland Plateau Cave Crayfish		
Aquatic cave obligate; subterranean streams and pools; Cumberland and Plateau escarpment abutting KY border; Pickett & Fentress counties.				S1S2	G2	
<u>Orconectes burri</u>	Taylor and Sabaj, 1998			Blood River Crayfish		
In woody debris or leaf piles, small -medium sized streams with sand-gravel substrates; Blood River drainage (TN River), Henry County.	CP, WU			S1	G2	
<u>Orconectes cooperi</u>	Cooper and Hobbs, 1980			Flint River Crayfish		
Among leaf litter in medium-sized streams; headwaters of Flint River watershed; Lincoln County.	ER			S1	G1	
<u>Orconectes incompitus</u>	Hobbs and Barr, 1972			Tennessee Cave Crayfish		
Aquatic cave obligate; subterranean streams & shallow pools; lower-elevation caves of Highland Rim escarp; Cumb River watershed.	CB	E		S1	G2	
<u>Orconectes pellucidus</u>	(Telli kampf, 1844)			Mammoth Cave Crayfish		
Aquatic cave obligate; subterranean streams & pools of Penneroyal Plain; Montgomery & Robertson counties.	WR			S3	G4	
<u>Orconectes shoupi</u>	Hobbs, 1948			Nashville Crayfish		
1st-order & larger streams, generally with bedrock bottom, under slab rock; endemic to Mill Creek watershed; Davison & Williamson cos.	CB	E	LE	S1S2	G1G2	
<u>Orconectes taylori</u>	Schuster, 2008			Crescent crayfish		
Found among woody debris & tree roots; small -med size trib of N Fork Obion River with slow-mod current; Henry County.	CP			S2	G2	
<u>Orconectes wrighti</u>	Hobbs, 1948			Hardin Crayfish		
Small -medium sized streams with cobble-sand substrates, under rocks or in leaf litter; western trib of the Tennessee River in Hardin & McNairy counties.	WU	E		S2	G2	

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS)	Crustaceans				
<u>Pseudocandona jeannelli</u>	(Kline, 1931)				
Aquatic cave obligate; reported from six caves along the western escarpment of the Cumberland Plateau.		S1S2		G2	
<u>Sagittocythere barri</u>	(Hart and Hobbs, 1961)				
Aquatic cave obligate; crayfish commensal.	ER, CB, CU			S3	G5
<u>Stygobromus barryi</u>	Holsinger, 1978				
Aquatic cave obligate; northern Blue Ridge mountains; Union County.	BR			S1	G2G3
<u>Stygobromus dicksoni</u>	Holsinger, 1978				
Aquatic cave obligate from drip pools; Lookout Mountain; Hamilton County.				S1S2	G5
<u>Stygobromus fecundus</u>	Holsinger, 1978				
Aquatic cave obligate, from rimstone pools; Cades Cove; Great Smoky Mountains National Park.	BR			S1	G1G2
<u>Stygobromus finleyi</u>	Holsinger, 1978				
Aquatic cave obligate, from shallow pools; northern Ridge & Valley; Claiborne County.	RV			S1	G3G4
<u>Stygobromus mackini</u>	Hubricht, 1943				
Aquatic cave obligate; reported from six counties in northern Ridge & Valley.				S2	G5
<u>Stygobromus nortoni</u>	(Holsinger, 1969)				
Aquatic cave obligate, from pools; Eastern Highland Rim and Ridge & Valley.	ER, RV			SH	G2G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
CRUSTACEA (AMPHIPODS, ISOPODS & DECAPODS) <u>Stygobromus sp. 24</u>	Crustaceans		Cave Amphipod (Overton Co., TN)		
Aquatic cave obligate; wet caves in the escarpment of the Cumberland Plateau; Overton County.	ER, CU			S1	G1
<u>Stygobromus sp. 30</u>			Bosnak's Cave Amphipod		
Aquatic cave obligate; reported from a handful of caves in the middle Cumberland; White and Van Buren counties.				S2	G2
<u>Stygobromus sp. 33</u>			A Cave Amphipod from Rutherford County		
Aquatic cave obligate; known from a single cave in the Central Basin of Rutherford Co.				S1	G1
<u>Stygobromus sp. 34</u>	Holsinger		A Cave Amphipod from Dickson County		
Aquatic cave obligate; known from a single cave in the Western Highland Rim of Dickson County.	WR			S1S2	G1G2
<u>Stygobromus sparsus</u>	Holsinger, 1978		A Cave Obligate Amphipod		
Aquatic cave obligate, from drip pools; Cades Cove; Great Smoky Mountains National Park.	BR			S1S2	G4
<u>Stygobromus vitreus</u>	Cope, 1872		An Amphipod		
Aquatic cave obligate; pools in wet caves; northernmost Highland Rim and southernmost Cumberland.	WR, ER, CU			S2	G4
COLEOPTERA (BEETLES)	Insects				
<u>Aloconota diversiseta</u>	Klimaszewski and Peck, 1986		A Rove Beetle		
Terrestrial cave obligate; Cumberland Plateau.	CU			S1	G1
<u>Anillinus sp. 5</u>			Flag Trail Cave Beetle		
Terrestrial cave obligate; northern Cumberland.	CU			S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
COLEOPTERA (BEETLES)	Insects				
<u>Arianops stygica</u>	Park, 1960				Cave Ant Beetle
Terrestrial cave obligate; known from one cave in the middle Cumberlands; Warren County.				S1	G1
<u>Atheta lucifuga</u>	Klimaszewski and Peck, 1986				Light Shunning Rove Beetle
Terrestrial cave associate; reported from two caves in the Cumberland Plateau; Van Buren County.	CU			S2	G4
<u>Batriasymmodes greeveri</u>	Park 1965				A Cave Obligate Beetle
Terrestrial cave obligate; northern Ridge & Valley.				S1S2	G1G2
<u>Batriasymmodes quisnamus</u>	(Park, 1951)				A Cave Obligate Beetle
Terrestrial cave obligate; middle Tennessee.	ER			S3	G3
<u>Batriasymmodes spelaeus</u>	(Park, 1951)				A Cave Obligate Beetle
Terrestrial cave obligate; northern Cumberlands and northern Ridge & Valley.	SV			S2?	G3G4
<u>Batrisodes barri</u>	Park, 1958				A Cave Obligate Beetle
Terrestrial cave obligate; Western Highland Rim; Dickson County.	WR			S1S2	G1G2
<u>Batrisodes clypeospecus</u>	Park, 1951				A Cave Obligate Beetle
Terrestrial cave obligate; northern Cumberlands.	ER			S1S2	G1G2
<u>Batrisodes ferulifer</u>	Park, 1960				A Cave Obligate Beetle
Terrestrial cave obligate; middle Tennessee; Central Basin; reported from Maury County.	CB			S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
COLEOPTERA (BEETLES)	Insects				
<u>Batrisodes gemmoides</u>	Park, 1960			A Cave Obligate Beetle	
Terrestrial cave obligate; Western Highland Rim; reported from Dickson County.		WR		S1	G1
<u>Batrisodes gemmus</u>	Park, 1956			A Cave Obligate Beetle	
Terrestrial cave obligate; Western Highland Rim; reported from Dickson County.		WR		S1	G1
<u>Batrisodes pannosus</u>	Park, 1960			A Cave Obligate Beetle	
Terrestrial cave obligate; Eastern Highland Rim.		ER		S1	G1
<u>Batrisodes valentinei</u>	Park, 1951			A Beetle	
Terrestrial cave obligate; southern Cumberland.				S1?	G2G4
<u>Cicindela patruela</u>	Dejean, 1825			Northern Barrens Tiger Beetle	
Prefers sandy/coarse gravel or eroding sandstone throughout range; dry woodlands; historic records from N Cumberland & GSMNP.				S2	G3
<u>Darlingtonia kentuckensis</u>	Valentine, 1952			A Ground Beetle	
Terrestrial cave obligate; northern Cumberland.				S1?	G3G4
<u>Nelsonites walteri</u>	Valentine, 1952			A Cave Obligate Beetle	
Terrestrial cave obligate, northern Cumberland.	ER, CU			S3	G3
<u>Nicrophorus americanus</u>	Olivier 1890			American Burying Beetle	
Grassland, old field shrubland, and hardwood forests; poss. west TN; carrion feeder; may be extirpated from Tennessee.		LE		SH	G2G3

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Pseudanophthalmus acherontis</u>	Barr, 1959				Echo Cave Beetle	
Terrestrial cave obligate; Central Basin; reported from Wilson & Rutherford counties.		CB			S1	G1
<u>Pseudanophthalmus bendermani</u>	Barr, 1959				Benderman's Cave Beetle	
Terrestrial cave obligate; Central Basin.		CB			S1S2	G1G2
<u>Pseudanophthalmus catherinae</u>	Barr, 1959				Catherine's Cave Beetle	
Terrestrial cave obligate; Central Basin.		CB			S1	G1
<u>Pseudanophthalmus ciliaris ciliaris</u>	Valentine, 1937				A Cave Obligate Beetle	
Terrestrial cave obligate; Western Highland Rim.					S1S2	G3G4T1T
<u>Pseudanophthalmus ciliaris orlindae</u>	Barr, 1959				A Cave Obligate Beetle	
Terrestrial cave obligate; Western Highland Rim.					S1S2	G3G4T1T
<u>Pseudanophthalmus colemanensis</u>	Barr, 1959				Coleman Cave Beetle	
Terrestrial cave obligate; Western Highland Rim.		WR			S1	G1
<u>Pseudanophthalmus cumberlandus</u>	Valentine, 1937				A Cave Obligate Beetle	
Terrestrial cave obligate; outer Central Basin.					S1S2	G1G2
<u>Pseudanophthalmus digitus</u>	Valentine, 1932				A Cave Obligate Beetle	
Terrestrial cave obligate; southern Cumberland; reported from Wharton County.					S1	G1G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Pseudanophthalmus engelhardti</u>	(Barber, 1928)				Engelhart's Cave Beetle	
Terrestrial cave obligate; northern Ridge & Valley.		RV			S1	G1
<u>Pseudanophthalmus farrelli</u>	(Barr, 1959)				A Cave Obligate Beetle	
Terrestrial cave obligate; eastern Highland Rim escarpment.		CB			S1S2	G1G2
<u>Pseudanophthalmus fowlerae</u>	Barr, 1980				Fowler's Cave Beetle	
Terrestrial cave obligate; eastern Highland Rim.		ER			S1	G1
<u>Pseudanophthalmus fulleri</u>	Valentine, 1932				A Cave Obligate Ground Beetle	
Terrestrial cave obligate; southern Cumberland.					S2S3	G2G3
<u>Pseudanophthalmus hesperus</u>	Barr, 1959				A Cave Obligate Beetle	
Terrestrial cave obligate; Western Highland Rim.		WR			S1	G1
<u>Pseudanophthalmus hirsutus</u>	Valentine, 1931				Cumberland Gap Cave Beetle	
Terrestrial cave obligate; northern Ridge & Valley.					S1	G1G2
<u>Pseudanophthalmus humeralis</u>	Valentine, 1931				A Ground Beetle	
Terrestrial cave obligate; southern Cumberland.		ER, CU			S2	G2
<u>Pseudanophthalmus inquisitor</u>	Barr, 1980				Inquirer Cave Beetle	
Terrestrial cave obligate; Eastern Highland Rim escarpment.		ER			S1	G1

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Pseudanophthalmus insularis</u>	Barr, 1959				Baker Station Cave Beetle	
Terrestrial cave obligate; northern Central Basin; known from single historical record in Davidson County.		WR			S1	GH
<u>Pseudanophthalmus intermedius</u>	(Valentine, 1931)				Intermediate Cave Beetle	
Terrestrial cave obligate; S Cumberlands; Franklin & Grundy counties.					S2	G2
<u>Pseudanophthalmus jonesi</u>	Valentine, 1945				Grassy Cove Cave Beetle	
Terrestrial cave obligate; Grassy Cove; Cumberland County.		CU			S1S2	G1G2
<u>Pseudanophthalmus loganensis</u>	Barr, 1959				A Cave Obligate Beetle	
Terrestrial cave obligate; Western Highland Rim.		WR			S1S2	G2G3
<u>Pseudanophthalmus longiceps</u>	Barr, 1981				Long-headed Cave Beetle	
Terrestrial cave obligate; Ridge & Valley.		RV			S1	G1G2
<u>Pseudanophthalmus macraeai</u>	Valentine, 1948				A Cave Obligate Beetle	
Terrestrial cave obligate; middle Cumberlands.		ER			S1S2	G1G2
<u>Pseudanophthalmus nickajackensis</u>	Barr, 1981				Nickajack Cave Beetle	
Terrestrial cave obligate; Nickajack Cave; Marion County.		CU			S1	G1
<u>Pseudanophthalmus nortoni</u>	Barr, 1981				Norton's Cave Beetle	
Terrestrial cave obligate; Ridge & Valley.		RV			S1	G1

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Pseudanophthalmus occidentalis</u>	Barr, 1959				Western Cave Beetle	
Terrestrial cave obligate; Western Highland Rim.		WR			S1	G1G2
<u>Pseudanophthalmus pallidus</u>	Barr, 1981				Pale Cave Beetle	
Terrestrial cave obligate; northern Ridge & Valley.		RV			S1S2	G1G2
<u>Pseudanophthalmus paradoxus</u>	Barr, 1981				Ridgetop Cave Beetle	
Terrestrial cave obligate; northern Ridge & Valley.		RV			S1	G1
<u>Pseudanophthalmus paulus</u>	Barr, 1981				Nobletts Cave Beetle	
Terrestrial cave obligate; southern Ridge & Valley; reported from one historical location in Monroe County.		RV			S1	GH
<u>Pseudanophthalmus paynei</u>	Barr, 1981				Payne's Cave Beetle	
Terrestrial cave obligate; northern Ridge & Valley; reported from Anderson County.		RV			S1	G1
<u>Pseudanophthalmus princeps</u>	Barr, 1979				A Cave Obligate Beetle	
Terrestrial cave obligate; Barren River watershed.					S1S2	G1G2
<u>Pseudanophthalmus pusillus</u>	Barr, 1981				Tiny Cave Beetle	
Terrestrial cave obligate; northern Ridge & Valley.		RV			S1	G1
<u>Pseudanophthalmus rotundatus</u>	Valentine, 1932				A Ground Beetle	
Terrestrial cave obligate; northern Ridge & Valley.		RV			S2	G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Pseudanophthalmus scutulus</u>	Barr, 1981			A Cave Obligate Beetle		
Terrestrial cave obligate; Cumberland Mountains.		CM			S1	G1
<u>Pseudanophthalmus sidus</u>	Barr, 1965			Meredith Cave Beetle		
Terrestrial cave obligate; northern Ridge & Valley.		RV			S1	G1
<u>Pseudanophthalmus simplex</u>	Barr, 1980			Simple Cave Beetle		
Terrestrial cave obligate; northern Eastern Highland Rim.		CB			S1S2	G1G2
<u>Pseudanophthalmus sp. 27</u>				Rumbling Falls Cave Beetle		
Terrestrial cave obligate; middle Cumberland; Van Buren & White counties.		ER, CU			S1	G1
<u>Pseudanophthalmus sp. 28</u>				Sells Cave Ground Beetle		
Terrestrial cave obligate; Fentress County.					S1	G1
<u>Pseudanophthalmus sp. 29</u>				Falling Springs Cave Beetle		
Terrestrial cave obligate; Overton County.		CU			S1	G1
<u>Pseudanophthalmus sp. 30</u>				Ace in the Hole Cave Beetle		
Terrestrial cave obligate; Fentress County.		CU			S1	G1
<u>Pseudanophthalmus sp. 36</u>	(T. C. Barr, Jr.)			Millers Cave Beetle		
Terrestrial cave obligate; escarpment to Short Mountain; Cannon County; known from one cave in Collins R watershed.		ER			S1?	GNR

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
COLEOPTERA (BEETLES)	Insects				
<u>Pseudanophthalmus sp. 37</u>			Caney Hollow Cave Ground Beetle	S1	G1
Terrestrial cave obligate; Eastern Highland Rim; known from one cave in Franklin County.					
<u>Pseudanophthalmus sp. 38</u>			Aaron Tolletts Cave Beetle	S1	G1
Terrestrial cave obligate; upper Sequatchie Valley; known from one cave in Blodsoe County.					
<u>Pseudanophthalmus sp. 39</u>			Baker Cave Beetle	S1	G1
Terrestrial cave obligate; known from one cave near Crab Orchard; Cumberland County.					
<u>Pseudanophthalmus sp. 40</u>			Keyhole Cave Beetle	S1	G1
Terrestrial cave obligate; known from two caves in the Sequatchie Valley of Sequatchie County.					
<u>Pseudanophthalmus sp. 41</u>			Wilmoth Cave Beetle	S1	G1
Terrestrial cave obligate; reported from one cave in the Sequatchie Valley of Sequatchie County.					
<u>Pseudanophthalmus templetoni</u>	Valentine, 1948		A Cave Obligate Beetle		
Terrestrial cave obligate; Collins River basin.	ER, CU			S1	G1
<u>Pseudanophthalmus tennesseensis</u>	Valentine, 1937		A Cave Obligate Beetle		
Terrestrial cave obligate; Ridge & Valley.				S2	G3
<u>Pseudanophthalmus tiresias</u>	Barr, 1959		Indian Grave Point Cave Beetle		
Terrestrial cave obligate; Eastern Highland Rim; DeKalb County.	CB			S1	G1

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Pseudanophthalmus tullahoma</u>	Barr, 1959			Duck River Cave Beetle		
Terrestrial cave obligate; Central Basin; Duck River drainage.		CB			S1	G1G2
<u>Pseudanophthalmus unionis</u>	Barr, 1981			Union County Cave Beetle		
Terrestrial cave obligate; Ridge & Valley; Union County.		RV			S1	G1G2
<u>Pseudanophthalmus valentinei</u>	Jeannel, 1949			A Cave Obligate Beetle		
Terrestrial cave obligate; northern Eastern Highland Rim; Putnam & Overton counties.		ER, CU			S2S3	G3G4
<u>Pseudanophthalmus vanburenensis</u>	Barr, 1959			A Cave Obligate Beetle		
Terrestrial cave obligate; middle Cumberland.		ER			S1	G1
<u>Pseudanophthalmus ventus</u>	Barr, 1981			Blowing Cave Beetle		
Terrestrial cave obligate; Lower Sequatchie Valley.		SV			S1	G1
<u>Pseudanophthalmus wallacei</u>	Barr, 1981			Wallace's Cave Beetle		
Terrestrial cave obligate; Ridge & Valley; Anderson County.		RV			S1	G1
<u>Ptomaphagus barri</u>	Peck 1973			A Cave Obligate Beetle		
Terrestrial cave obligate; Cannon County.		CB			S1S2	G2G3
<u>Ptomaphagus chromolithus</u>	Peck, 1984			A Cave Obligate Beetle		
Terrestrial cave obligate; Paint Rock River drainage; Franklin County.		CU			S1	G2G3

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Ptomaphagus fecundus</u>	Barr 1963			A Cave Obligate Beetle		
Terrestrial cave obligate; Franklin County; High and Rim escarpment.		CB			S1	G1
<u>Ptomaphagus hubrichti</u>	Barr 1959			A Cave Obligate Beetle		
Terrestrial cave obligate; Eastern High and Rim escarpment.					S2	G2G3
<u>Subterrochus ferus</u>	(Park, 1951)			A Cave Obligate Beetle		
Terrestrial cave obligate; reported from two caves in S Cumberlands; Franklin & Grundy counties.					S1S2	G1G2
<u>Trechus bowlini</u>	Barr, 1962			A Carabid Beetle		
Terrestrial; known only from spruce-fir forests at high elevations in the Great Smoky Mountains; 4900-6600 ft elevation.					S2S3	GNR
<u>Trechus caliginis</u>	Barr, 1985			A Carabid Beetle		
Terrestrial; known only from summit of Camp Creek Bald; Blue Ridge mountains; Greene County.		BR			S1	GNR
<u>Trechus cumberlandus</u>	Barr, 1962			Cumberland Ground Beetle		
Terrestrial associate of caves, springs, sinkholes; escarpment of the Cumberland Plateau, generally.		ER, CU			S2	G2
<u>Trechus haoe</u>	Barr, 1979			A Carabid Beetle		
Terrestrial; found beneath moss carpets; summits of Unicoi Mountains; Blue Ridge; Monroe County.					S2	GNR
<u>Trechus hydropicus beutemuelleri</u>	Jeannel, 1931			A Carabid Beetle		
Terrestrial; under moss, rocks in ravines, under and inside rotting logs, or in spruce and fir needle duff above 5000 ft; Blue Ridge.		BR			S2S3	GNRTNR

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<i>Trechus inexpectatus</i>	Barr, 1985				A Carabid Beetle	
Terrestrial; known only from summit of Camp Creek Bald; Blue Ridge mountains; Greene County.		BR			S1	GNR
<i>Trechus luculentus luculentus</i>	Barr, 1962				A Carabid Beetle	
Terrestrial; found under rocks or debris beside seeps & springs or near water in little ravines; Great Smoky Mountains; Sevier County.					S1	GHTH
<i>Trechus luculentus unicoi</i>	Barr, 1979				A Carabid Beetle	
Terrestrial; found under rocks or debris beside seeps & springs or near water in little ravines; Unicoi Mtns; Blue Ridge; Monroe County.					S1	GHTH
<i>Trechus nebulosus</i>	Barr, 1962				A Carabid Beetle	
Terrestrial; moss carpets or mossy boulders at higher elevations; north portion of the central Great Smoky Mountains; Sevier County.					S3	GNR
<i>Trechus novaculosus</i>	Barr, 1962				A Carabid Beetle	
Terrestrial; found under wet scree piles at high elevations in spruce-fir forests of central Great Smoky Mountains; Sevier County.					S1	GH
<i>Trechus roanicus</i>	Barr, 1962				A Carabid Beetle	
Terrestrial; known only from the summit of Roan Mountain (Roan High Knob); Cherokee National Forest; Carter County.		BR			S1	GH
<i>Trechus stupkai</i>	Barr, 1979				A Carabid Beetle	
Terrestrial; mossy rocks at edge of Ramsey Prong upst Ramsay Cascades; Gt Smoky Mtns Natl Pk; Sevier Co; only known location.					S1	GNR
<i>Trechus talequah</i>	Barr, 1962				A Carabid Beetle	
Terrestrial; known only from the Unicoi Mountains near Haw Knob between 4800-5000 ft; Monroe County.		BR			S1	GNR

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLEOPTERA (BEETLES)	Insects					
<u>Trechus tennesseensis tauricus</u>	Barr, 1962				A Carabid Beetle	
Terrestrial; known only from sink around entrance to Bull Cave; Great Smoky Mountains National Park; Blount County.					S1	GNR/TNR
<u>Trechus tennesseensis tennesseensis</u>	Barr, 1962				A Carabid Beetle	
Terrestrial; known only from Berry Cave entrance/sink; Ridge & Valley; Roane County.					S1	GNR/TNR
<u>Trechus tonitru</u>	Barr, 1962				A Carabid Beetle	
Terrestrial; known only from summit of Thunderhead; high elevation; Great Smoky Mountains National Park; Blount County.	BR				S1	GNR
<u>Trechus tuckaleechee</u>	Barr, 1962				A Carabid Beetle	
Terrestrial cave associate; known only from two cave entrances in Tuckaleechee Cove; base of Smoky Mountains; Blount County.					S2	GNR
<u>Trechus uncifer</u>	Barr, 1962				A Carabid Beetle	
Terrestrial; known from a few sites in central and eastern Gt Smoky Mountains National Park above 5500 ft; Sevier & Cocke counties.					S3	GNR
<u>Trechus valentinei</u>	Barr, 1979				A Carabid Beetle	
Terrestrial; high elev spruce-fir forests under rocks adj streams/springs; shallow ravines; central Gt Smoky Mts Ntl Park; Sevier Co.					S2S3	GNR
<u>Trechus vandykei</u>	(Jeannel, 1927)				A Carabid Beetle	
Terrestrial; found in leafmold or under moss mats; Camp Creek Bald & Unaka Mountain; Blue Ridge; Greene & Unicoi counties.	BR				S3?	GNR
<u>Trechus verus</u>	Barr, 1962				A Carabid Beetle	
Terrestrial; confined to eastern end of Smoky Mountains, summit & upper slopes of Mt. Sterling; Cocke County.					S2S3	GNR

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
COLEOPTERA (BEETLES) <u>Tychobythinus strinatii</u>	Insects Besuchet, 1982			A Cave Obligate Beetle	
Terrestrial cave obligate; middle Cumberland.		ER		S1S2	G1G2
COLLEMBOLA (SPRINGTAILS) <u>Arrhopalites marshalli</u>	Christiansen and Bellinger, 1996			A Cave Springtail	
Terrestrial cave obligate; reported from four caves in the Cumberland Escarpment; Grundy & Overton counties.				S2	G3
<u>Arrhopalites pavo</u>	Christiansen and Bellinger, 1996			A Cave Springtail	
Terrestrial cave obligate; reported from three caves in the Cumberland Escarpment; Grundy & Overton counties.				S1S2	G3?
<u>Arrhopalites sp. 4</u>				A Cave Springtail (species 1)	
Terrestrial cave obligate; middle Cumberland.		ER		S1	G1
<u>Folsomia sp. 2 nr. macrochaeta</u>				A Springtail From Indian Cave	
Terrestrial cave obligate; middle Cumberland; White County.		ER		S1	G1
<u>Hypogastrura sp. 1</u>				A Viatica Group Springtail	
Terrestrial cave obligate; Van Buren County; known from one cave in the Cumberland Plateau.		CU		S1	G1
<u>Neanura sp. 1</u>				A Cave Obligate Springtail From TN	
Terrestrial cave obligate; Rumbling Falls area, Van Buren Co; known from a single cave.		ER		S1	G1
<u>Onychiurus sp. 2</u>				A Cave Obligate Springtail From TN	
Terrestrial cave obligate; middle Cumberland; reported from a single cave in Van Buren County.		ER		S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Invertebrate Animal					
COLLEMBOLA (SPRINGTAILS) <u>Pseudosinella christianseni</u> Terrestrial cave obligate; portions of Cumberland and Plateau & Sequatchie Valley.	Insects Salmon, 1964 ER, CB, SV, CU		A Cave Obligate Springtail	S2	G5
<u>Pseudosinella orba</u> Terrestrial cave obligate; reported from two caves in northern Cumberlands; Fentress & Pickett counties.	Christiansen, 1961 ER, CU		A Cave Springtail	S2	G3G4
<u>Pseudosinella pecki</u> Terrestrial cave obligate; reported from three caves in S Cumberlands, Grassy Cove, & Crab Orchard.	Christiansen and Bonet, 1980 ER, CU		Peck's Cave Springtail	S2	G2G3
<u>Pseudosinella sp. 5</u> Terrestrial cave obligate; middle Cumberlands.			A Cave Springtail From Swamp River Cave	S1	G1
<u>Pseudosinella sp. 6</u> Terrestrial cave obligate; White County. Reported from a single cave.	ER		A Springtail From Indian Cave	S1	G1
<u>Pseudosinella sp. 7 nr. nata</u> Terrestrial cave obligate; Van Buren Co.	CU		A Springtail From Upper Cummings Cove Cave	S1	G1
<u>Pseudosinella spinosa</u> Terrestrial cave obligate; middle and southern Cumberlands.	(Delmare DeBoutteville, 1949) ER, CU		A Cave Obligate Springtail	S2	G5
<u>Sinella basidens</u> Terrestrial cave obligate; Eastern Highland Rim.	Bonet, 1934 ER, CU		A Cave Obligate Springtail	S2	G3G4

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
COLLEMBOLA (SPRINGTAILS)		Insects				
<u>Tomocerus missus</u>	Mills, 1949				Relict cave springtail	
Terrestrial cave obligate; unusual distribution including one cave S Cumberlands & one cave N Eastern Highland Rim.				S2		G4
<u>Triacanthella copelandi</u>	(Wray, 1963)				Copeland's Springtail	
Terrestrial cave associate; middle Cumberlands; also reported from Great Smoky Mtns.		CU		S1		G1
DIPLURA (DIPLURANS)						
<u>Litocampa jonesi</u>	Conde, 1949				A Bristletail	
Terrestrial cave obligate, Western Highland Rim.				S1?		G2G3
<u>Litocampa sp. 5</u>					A Cave Dipluran From TN	
Terrestrial cave obligate, Cumberland Plateau escarpment.		ER, SV, CU		S1		G2
<u>Litocampa sp. 6</u>					Buffalo Cove Cave Dipluran	
Terrestrial cave obligate, northern Cumberlands; possibly endemic to Buffalo Cove, Fentress County.		ER, CU		S1		G1
<u>Litocampa sp. 7</u>					Mill Hollow Cave Dipluran	
Terrestrial cave obligate, northern Cumberlands.		ER, CU		S1		G1
<u>Litocampa sp. 8</u>					Mountain Eye Cave Dipluran	
Terrestrial cave obligate, northern Cumberlands.		CU		S1		G1
<u>Litocampa valentinei</u>	Conde, 1949				A Cave Obligate Bristletail	
Terrestrial cave obligate, southern Cumberlands.		ER, CB, SV, CU		S2		G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
DIPLURA (DIPLURANS) <u>Podocampa sp. 1</u>	Insects				A Dipluran
Terrestrial cave associate and poss obligate; S Cumberl ands; known from one cave in Franklin County.				S1	G1
EPHEMEROPTERA (MAYFLIES) <u>Epeorus subpallidus</u>	(Traver, 1937)				A Mayfly
Streams; Great Smoky Mountains National Park; upper Tennessee River watershed.				S1	G1Q
<u>Habrophlebiodes celeteria</u>	Berner, 1975				A Mayfly
Blue Ridge mountain streams; Tennessee River watershed; reported from Monroe & Union counties.				S2	G2G4
<u>Heterocloeon grande</u>	(Wiersema and Long, 2000)				A Mayfly
Larvae in first-fourth order streams in clumps of submerged grass along margins or in shallow run habitats; middle Tennessee.				S2	G2G3
<u>Maccaffertium sinclairi</u>	(Lewis, 1979)				A Mayfly
Small, cool, high quality, soft-water streams in slow to moderate current; Sequatchie Valley; also recorded from Blount Co., GSMNP.				S2	G2G3
<u>Paraleptophlebia kirchneri</u>	Kondratieff and Durfee, 1994				A Mayfly
Probably restricted to small, cool streams; reported from Williamson & Trousdale counties.				S1	G1G3
<u>Plauditus veteris</u>	(McDunnough, 1924)				A Mayfly
Probably found in small, cold streams; reported from Overton County.				S2	G3G4
LEPIDOPTERA (BUTTERFLIES & MOTHS)					
<u>Amblyscirtes belli</u>	Freeman, 1941				Bell's Roadside Skipper
Open riparian areas in moist, rich woodlands; may visit home gardens; hosts include Indian wood-oats (<i>Chasmanthium latifolium</i>).				S2S3	G3G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
LEPIDOPTERA (BUTTERFLIES & MOTHS)	Insects				
<u>Amblyscirtes linda</u>	H. A. Freeman, 1943		Linda's Roadside-skipper		
Found near woodl and streams wi th Chasmanti um latifolia; west Tennessee; reported from Madison County.				S2	G2G3
<u>Amblyscirtes reversa</u>	F. Jones, 1973		Reversed Roadside-Skipper		
Found in swampy or wet woods near slow streams wi th cane undergrowth; SE TN; reported from Hamilton County.				S2	G3G4
<u>Autochton cellus</u>	(Boisduval and Le Conte, [1837])		Golden-banded Skipper		
Damp wooded ravi nes along streams or other wet areas; may be observed nectari ng along sunny slopes; host i s hog peanut.				S3	G4
<u>Callophrys irus</u>	(Godart, [1824])		Frosted Elfin		
Open roadsides, woodl and edges, scrub or brushy fi elds w/ yellow wild indigo (<i>Baptisia tinctoria</i>) or other poss. Fabaceae hosts.				S1?	G3
<u>Celastrina nigra</u>	(W. Forbes, 1960)		Dusky Azure		
Moist deciduous forests, esp. shaded northern slopes, where i ts host, <i>Aruncus dioicus</i> (goat's beard), occurs; S. Apps & N. Cumb.	CU			S2	G4
<u>Erynnis tages</u>	(Edwards, 1862)		Early Hairstreak		
Beech or beech-oak-hazel nut forests, mostly in canopy; may visit unpaved roads/trails; hosts incl . beech and hazel nut; S. Appalach.				S2	GU
<u>Euchloe olympia</u>	(W. H. Edwards, 1871)		Olympia Marble		
Inhabits open woods, shale barrens, & very dry meadows; reported from far NE TN.				S2	G4G5
<u>Lycaena hyllus</u>	(Cramer, 1775)		Bronze Copper		
Marshes, sedge meadows, moist to wet grassy meadows, ditches, fens, streamside or pondshore wetlands, or roads and right of ways through marshlands. West TN.	MF			S3	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
LEPIDOPTERA (BUTTERFLIES & MOTHS) <u>Mesapamea trigona</u>	Insects (J. B. Smith, 1902)			A Noctuid Moth	
Stands of giant cane, typically in riparian or other forested bottomland habitats; range uncertain; reported from Smith Co.				SH	GU
<u>Phyciodes batesii</u>	(Reakirt, [1866])			Tawny Crescent	
Dry rocky ridges or hill sides, glades, open woods; east TN; may be extirpated from state.				S1S2	G4
<u>Speyeria diana</u>	(Cramer, 1777)			Diana Fritillary	
Fields, edges, and openings in moist, rich, forested mountains and valleys; Blue Ridge & Cumberland Plateau generally.	RV, BR, CU			S3	G3G4
ODONATA (DRAGONFLIES & DAMSELFLIES)					
<u>Gomphus consanguis</u>	(Selys, 1879)			Cherokee Clubtail	
Small, spring-fed streams w/sand, gravel & fine detritus substrate in partly shaded to open areas; Ridge & Valley.	RV, CM			S1	G3
<u>Gomphus sandrius</u>	Tennessee, 1983			Tennessee Clubtail	
Slow streams with bare bedrock shores; Central Basin; upper Duck River and middle Cumberland River watersheds.	CB			S1	G1
<u>Macromia margarita</u>	Westfall, 1947			Mountain River Cruiser	
Typically small mountain streams, usually rocky but with silt deposits; reported from Campbell & Blount counties.	BR			S2S3	G3
<u>Ophiogomphus acuminatus</u>	Carlile, 1981			Acuminate Snaketail	
Clear, mostly shaded streams with at least pockets of sandy gravel; Western Highland Rim & Western Uplands.	WR, WU			S2	G3
<u>Ophiogomphus alleghaniensis</u>	Carlile, 1982			Allegheny Snaketail	
Riffle areas of spring-fed streams; Cumberland Plateau, Ridge & Valley, & Blue Ridge; not watershed specific.	RV, CU, BR			S1	G3T2T3

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
ODONATA (DRAGONFLIES & DAMSELFLIES)	Insects					
<u>Ophiogomphus edmundo</u>	Needham, 1851					Edmund's Snaketail
Clear, moderately flowing mountain streams and rivers; reported from Conasauga River watershed; Cherokee National Forest.		RV, BR			S1	G1G2
<u>Ophiogomphus howei</u>	Bromley, 1924					Pygmy Snaketail
Clear rivers with strong current over coarse cobbles and with peridotitic rapids; possible in Southern Appalachians.		CP, WU			S3?	G3
<u>Somatochlora elongata</u>	(Scudder, 1866)					Ski-tipped Emerald
Shaded forest pools and ponds above 2000 ft elevation; Blue Ridge.		BR			S2	G5
<u>Stylurus notatus</u>	(Rambur, 1842)					Elusive Clubtail
Clear rivers with moderate current and gravel or sandy benthos; probably northern middle Tennessee.					S2	G3
<u>Stylurus townesi</u>	Gloyd, 1936					Townes' Clubtail
Sand-bottomed forest streams and rivers; adults forage on streamside trees. Tennessee range uncertain.					S3?	G3
ORTHOPTERA (GRASSHOPPERS & CRICKETS)						
<u>Hadenoecus jonesi</u>	Hubbell, 1978					Jone's Cave Cricket
Terrestrial cave associate; reported from a handful of caves in S Cumberlands; Franklin & Marion counties.					S2	GNR
<u>Leptysma marginicollis</u>	(Serville, 1838)					Cattail Toothpick Grasshopper
Wetlands with emergent vegetation, esp. cattails; may exist as disjunct population in Barrens of Warren & Coffee counties.					S2	G5
<u>Melanoplus ingrami</u>	Hill, 2010					A Spur-throat Grasshopper
Found in gravel zone of cedar glades of Central Basin characterized by shallow gravel-covered soil with little canopy and patchy herbaceous cover.					S1S3	G1G3

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
PLECOPTERA (STONEFLIES)	Insects					
<i>Allocapnia brooksi</i>	Ross, 1964					Sevier Snowfly
Small -medium size creeks; northern Ridge & Valley and adjacent Blue Ridge; upper Tennessee River watershed.		RV			S2	G2
<i>Allocapnia cunninghami</i>	Ross and Ricker, 1971					Karst Snowfly
Small -medium size creeks; northern Highland Rim; Barren River watershed.		WR			S1	G1G2
<i>Allocapnia fumosa</i>	Ross, 1964					Smokies Snowfly
Benthic; high-elevation springs in GSMNP; Sevier County; Southern Blue Ridge Mountains.					S2	G2
<i>Allocapnia perplexa</i>	Ross and Ricker, 1971					Perplexing Snowfly
Low-mod gradient streams with limestone bedrock & interspersed rubble; Elk Bedsole Creek, Cumberland River watershed; Sumner Co.		CB			S1	G1
<i>Allocapnia sequatchie</i>	Kondratieff and Kirchner, 2000					A Stonefly
Found in Sequatchie River & larger tributaries; Sequatchie Valley.					S2?	G3G4
<i>Allocapnia unzickeri</i>	Ross and Yamamoto, 1966					Cumberland Snowfly
Eastern edge of the Cumberland Plateau and immediate adjacent regions; in small, rapid, gravelly or rocky streams.					S2S3	G3
<i>Amphinemura mockfordi</i>	(Ricker, 1952)					Tennessee Forestfly
Benthic; reported from streams near Monteagle, Grundy County; Southern Cumberland Plateau.					S2	G2
<i>Beloneuria georgiana</i>	(Banks, 1914)					Georgia Stone
High elevation spring-fed brooks; reported from Great Smoky Mtns National Park.					S1	G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
PLECOPTERA (STONEFLIES)	Insects					
<u>Hydroperla rickeri</u>	(Stark, 1984)				Tennessee Springfly	
Small to mid-sized streams; northern Central Basin; Cumberland and River watershed; Trousdale County.		CB			S2	G2
<u>Leuctra monticola</u>	Hanson, 1941				Mountain Needlefly	
Benthic; reported from fewer than 5 streams in GSMNP; S Blue Ridge Mountains; also from far NE Alabama near TN line.					S1	G1Q
<u>Leuctra nephophila</u>	Hanson, 1941				Clouded Needlefly	
Benthic; high-elevation seeps and springs in GSMNP; S Blue Ridge Mountains.					S2	G3
<u>Megaleuctra williamsae</u>	Hanson, 1941				Smokies Needlefly	
Higher elevation springs, seeps, and creeks in portions of Great Smoky Mountains Natl Park.					S1S2	G2
<u>Neoperla coosa</u>	Smith and Stark, 1998				Coosa Stone	
Benthic; distribution unclear, but includes protected lands in Blount, Hardin, Morgan, and Rutherford counties.					S2	G2
<u>Oconoperla innubila</u>	(Needham and Claassen, 1925)				Hairy Springfly	
Benthic; high-elevation seeps and springs in GSMNP; Sevier County; S Blue Ridge Mountains.					S2	G2
<u>Perlesta adena</u>	Stark, 1989				Adena Stone	
Streams or small rivers of the Barren, Cumberland, and Harpeth river watersheds; Sumner, Trousdale, & Williamson counties.					S2?	G3G4
<u>Perlesta etnieri</u>	Kondratieff and Kirchner, 2002				A Stonefly	
Streams or small rivers of the Duck and Harpeth river watersheds; Central Basin; Maury & Williamson counties.					S1S2	G1G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
PLECOPTERA (STONEFLIES)	Insects					
<u>Perlesta frisoni</u>	Banks, 1948				Blueridge Stone	
Generally restricted to higher elevation pristine streams; S Apps & Cumb Plateau; reported from Blount, Cocke, & Cumberland cos.			S2?		G3	
<u>Perlesta lagoi</u>	Stark, 1989				Gulf Stone	
Streams or small rivers of the Sequatchie & Obed river watersheds; Cumberland and Blodsoe counties.			S2?		G3	
<u>Soyedina alexandria</u>	Grubbs, 2006				A Stonefly	
Benthic tributaries of the Harpeth & Cumberland rivers; Cheatham, Williamson, & Sumner counties.			S1S2		G1G2	
<u>Zapada chila</u>	(Ricker, 1952)				Smokies Forestfly	
Unpolluted springs/spring brooks & high elevation headwaters; GSMNP; known from a short stretch of one stream near Newfound Gap.			S1		G2	
TRICHOPTERA (CADDISFLIES)						
<u>Agapetus diacanthus</u>	Edwards, 1956				A Caddisfly	
Springs of the southern Cumberland escarpment; reported from Franklin, Marion, & Sequatchie counties; possibly endemic.			S1S2		G1G2	
<u>Agapetus spinosus</u>	Etnier and Way, 1973				A Caddisfly	
Spotty distribution from streams of the Cumberland Plateau including Cumberland, Franklin, Scott, and Sequatchie counties.			S2		G2	
<u>Agarodes stannardi</u>	(Ross, 1962)				Stannard's Agarodes Caddisfly	
Larvae reported from cool, sandy springs/streams; records include two streams in Hardin County, Tennessee River watershed.			S2S3		G2G3	
<u>Brachycentrus etowahensis</u>	Wallace, 1971				A Caddisfly	
Benthic; a riverine species reported from Polk & Loudon counties; Ridge & Valley; Lower Hiwassee but poss. extirp. from Little TN R.			S2		G3	

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
TRICHOPTERA (CADDISFLIES)	Insects					
<u>Cheumatopsyche helma</u>	Ross, 1939					
Streams of montane origin; east Tennessee; Tennessee River watershed.		BR			S1S3	G3
<u>Glyphopsyche sequatchie</u>	Etnier and Dix, 1999					
Spring runs emerging from caves; Lower Sequatchie River & Battle Creek watersheds; Marion County.		SV			S1	G1
<u>Homolepta flinti</u>	Weaver, 1985					
Benthic; reported from streams in the mid- and S Cumberland; Franklin & White counties.					S2	G2
<u>Hydropsyche bassi</u>	Flint, Voshell and Parker, 1979					
Benthic; reported from two streams in Knox & Meigs counties; Ridge & Valley.					S2	G2
<u>Hydropsyche etnieri</u>	(Schuster and Talak, 1977)					
Spring-fed creeks; northern Ridge & Valley; upper Tennessee River watershed.		RV			S2	G2
<u>Hydropsyche rotosa</u>	Ross, 1947					
Benthic; uses vertical limestone ledges of small -medium creeks; northern Ridge & Valley.					S2	G2G3
<u>Hydroptila chattanooga</u>	Frazer and Harris, 1991					
Benthic; reported solely from one stream in GSMNP; S Blue Ridge Mountains.					S2	G2
<u>Hydroptila decia</u>	Etnier and Way, 1973					
Small, clear, spring-fed streams with lush growths of watercress; W Knox County; TN River watershed; also one county in VA.					S1S2	G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Invertebrate Animal					
TRICHOPTERA (CADDISFLIES)	Insects				
<u>Hydroptila mcgregori</u>	Harris and Huryn, 2000			A Caddisfly	
Benthic; reported from a single spring in Knox County; Ridge & Valley.				S2	G2G3
<u>Hydroptila oneili</u>	Harris, 1985			A Caddisfly	
Benthic; reported from one creek in Polk County; S Blue Ridge Mountains.				S2	G2G3
<u>Hydroptila paramoena</u>	Harris, 1985			A Caddisfly	
Benthic; reported from streams in Polk County (S Appalachians) and Cumberland, Morgan, & Scott counties (N Cumberlands).				S2	G2G3
<u>Hydroptila patriciae</u>	Harris, 1985			A Caddisfly	
Inhabits springs/spring-fed creeks in S Cumberlands; known from one large spring in Marion County.				S1	G1
<u>Lepidostoma compressum</u>	Etnier and Way, 1973			A Caddisfly	
High quality streams of the northern Cumberlands; reported from Cumberland, Morgan, & Rhea counties.				S1S2	G1G2
<u>Lepidostoma etnieri</u>	Weaver, 1988			A Caddisfly	
Reported from creeks in Grainger, Roane, and Knox counties; Ridge & Valley.				S1S2	G1G2Q
<u>Lepidostoma excavatum</u>	Flint and Wiggin, 1961			A Caddisfly	
Reported from high quality montane streams of Blue Ridge Mountains; Great Smoky Mountains NP.				S2	G2G3
<u>Lepidostoma lobatum</u>	Wallace and Sherberger, 1972			A Caddisfly	
Reported from high quality streams of the Blue Ridge Mountains; Great Smoky Mtns SP; Sevier County.				S2	G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Invertebrate Animal					
TRICHOPTERA (CADDISFLIES)	Insects				
<u>Lepidostoma stylifer</u>	Flint and Wiggin, 1961			A Caddisfly	
Reported from high quality streams of the Blue Ridge Mountains; Great Smoky Mtns SP.				S2	G2G3
<u>Manophylax butleri</u>	Schuster, 1997			A Caddisfly	
Pseudo-terrestrial larvae reported from damp vertical rock faces of the northern Cumberlands; Big South Fork watershed; Scott County.				S2	G2
<u>Neophylax kolodskii</u>	Parker, 2000			A Caddisfly	
High-quality streams of Great Smoky Mts National Park; may be endemic to Tennessee.				S1	G1
<u>Neophylax securis</u>	Vineyard and Wiggin, 1987			A Caddisfly	
Occurs in small headwater streams of Cumberland Plateau; reported from Marion & White counties.				S1S2	G1G2
<u>Ochrotrichia elongiralla</u>	Harries, 1986			A Caddisfly	
Benthic, stream dweller; reported from a single creek in Knox County; Ridge & Valley.				S1	G1G2
<u>Pseudogoera singularis</u>	Carpenter, 1933			A Caddisfly	
Benthic; found in seepage areas in Blount, Cocke, & Sevier counties; S Blue Ridge Mountains.				S2	G2G3
<u>Rhyacophila amicis</u>	Ross, 1956			A Caddisfly	
High-quality streams of the Southern Appalachians; reported from Blount, Monroe, & Sevier counties.				S2	G2
<u>Wormaldia mohri</u>	(Ross, 1948)			A Caddisfly	
Benthic; reported from streams in Greene & Sevier counties; S Blue Ridge Mountains.				S2	G2G3

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
TRICHOPTERA (CADDISFLIES)	Insects					
Wormaldia thyria	Denni ng, 1950					A Caddisfly
Streams of the northern Cumberl ands; reported from Fentress & Cumberl and cos.; also possibl y coll . in Sevier County (S Appal .).					S2	G3
BIVALVIA (MUSSELS)	Molluscs					
Alasmidonta atropurpurea	(Rafinesque, 1831)					Cumberland Elktoe
Small creeks to medium-sized rivers with slow current, sand substrates, and large cobble; upper Cumberl and River watershed.	ER, CM, CU	E	LE	S1S2	G1G2	
Alasmidonta raveneliana	(I . Lea, 1834)					Appalachian Elktoe
Large creeks/small rivers with stable coarse sand and gravel substrates with cobble & boulders; upper Tennessee River watershed.	RV, BR	E	LE	S1	G1	
Cumberlandia monodonta	(Say, 1829)					Spectaclecase
Medium to large rivers; in substrates from mud and sand to gravel, cobble, and boulders; Cumberl and and Tennessee river systems.	WR, CB, RV, WU, SV		LE	S2S3	G3	
Cyprogenia stegaria	(Rafinesque, 1820)					Fanshell
Medium to large streams and rivers with coarse sand and gravel substrates; Cumberl and and Tennessee river systems.	RV, CB, WU	E	LE , XN	S1	G1Q	
Dromus dromas	(I . Lea, 1834)					Dromedary Pearlymussel
Medium-large rivers with riffles and shoals w/ relatively firm rubble, gravel, and stable substrates; Tennessee & Cumberl and systems.	ER, RV, CB, SV	E	LE , XN	S1	G1	
Elliptio arca	(Conrad, 1834)					Alabama Spike
Shallow riffles or slow-moving water with substrates of fine gravel, sand, & silt; Conasauga River; Polk & Bradley cos.; Ridge & Valley.				S2	G2G3Q	
Elliptio arctata	(Conrad, 1834)					Delicate Spike
In substrates of coarse sand, gravel, and cobble; prefers strong current; Conasauga River; Polk & Bradley counties; Ridge & Valley.	BR			S2	G2G3Q	

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
BIVALVIA (MUSSELS) Epioblasma ahistedti	Molluscs Jones and Neves, 2010 Gravel shoals in medium to large rivers; restricted to Duck River upstream of Columbia; Maury and Marshall counties; Central Basin.	CB	E	LE	S1 G1
Epioblasma brevidens	(I. Lea, 1831)				Cumberlandian Combshell
	Large creeks to large rivers, in coarse sand or mixtures of gravel, cobble, or rocks; Tennessee & Cumberland river systems.	RV, CB, CU	E	LE, XN	S1 G1
Epioblasma capsaeformis	(I. Lea, 1834)				Oyster Mussel
	Shallow riffles in mod-swift current of small -medium rivers with coarse sand and gravel; Tennessee & Cumberland river systems excluding the Duck River.	RV, CB, SV	E	LE, XN	S1 G1
Epioblasma florentina walkeri	(Wilson and H. W. Clark, 1914)				Tan Riffleshell
	Found in river headwaters, in riffles and shoals in sand and gravel substrates; Tennessee & Cumberland river systems.	WR, CB, RV, BR, CU	E	LE	S1 G1T1
Epioblasma metastriata	(Conrad, 1838)				Upland Combshell
	Sand & gravel substrates in riffle sections of small -medium size rivers; Conasauga River; Polk County.	RV	E	LE	SH GH
Epioblasma obliquata obliquata	(Rafinesque, 1820)				Catspaw
	Medium-large rivers, in sand and gravel substrates in runs and riffles; Tennessee & Cumberland river systems.	CB	E	LE	S1 G1T1
Epioblasma othcaloogensis	(I. Lea, 1857)				Southern Acornshell
	Medium size rivers with moderate current and fine gravel substrates; Consasauga River; Polk County.		E	LE	SH GHQ
Epioblasma triquetra	(Rafinesque, 1820)				Snuffbox
	Riffles of medium-large rivers with stony or sandy bottoms, in swift currents, usually deeply buried; Tennessee & Cumb. river systems.	RV, CB		LE	S3 G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
BIVALVIA (MUSSELS)	Molluscs				
Fusconaia cor	(Conrad, 1834)				Shiny Pigtoe
Shoals and riffles of small-medium sized rivers with mod-fast current over sand-cobble substrates; upper Tennessee River watershed.	ER, RV, CB	E	LE, XN	S1	G1
Fusconaia cuneolus	(I. Lea, 1840)				Finerayed Pigtoe
Riffles of forks and shoals of moderate gradient streams in firm cobble and gravel substrates; middle & upper Tennessee River watershed.	RV, CB, SV, CU	E	LE, XN	S1	G1
Hamiota altilis	(Conrad, 1834)				Finelined Pocketbook
Creeks/small rivers with substrates of sand, mud, & gravel, & mod current; Conasauga River & Coahulla Ck; Polk & Bradley counties.	RV, BR	T	LT	S1S2	G2G3
Hemistena lata	(Rafinesque, 1820)				Cracking Pearlymussel
Medium-sized rivers of mod current, deeply buried in mud, sand, gravel, and cobble substrates; Tennessee & Cumberland river systems.	WR, RV, CB, WU	E	LE, XN	S1	G1
Lampsilis abrupta	(Say, 1831)				Pink Mucket
Generally a large river species, preferring sand-gravel or rocky substrates with mod-strong currents; Tennessee & Cumberland river systems.	ER, WR, RV, CB, WU, SV	E	LE	S2	G2
Lampsilis ornata	(Conrad, 1835)				Southern Pocketbook
Creeks/small rivers with substrates of sand, mud, & gravel, & mod current; Conasauga River; Polk & Bradley cos.; Ridge & Valley.				S2S3	G5
Lampsilis siliquoidea	(Barnes, 1823)				Fatmucket
Slowwater with mud subst; Wolf R (Miss R trib); west TN; may occur at Reelfoot Lk; also rept Drakes Ck (Cumb R), Sumner Co.	CP, MF			S2	G5
Lampsilis virescens	(I. Lea, 1858)				Alabama Lampmussel
Found in sand and gravel substrates in shoal areas of small-medium size rivers; middle and upper TN R system; recently rediscovered in Emory River.	RV, CU	E	LE	S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
BIVALVIA (MUSSELS)	Molluscs				
<u>Lasmigona holstonia</u>	(I. Lea, 1838)			Tennessee Heelsplitter	
Spring runs, creeks, & small rivers, in subst of sand & mud; upper Tenn & Conasauga river watersheds; Blue Ridge & Ridge & Valley.	ER, RV, BR			S2	G3
<u>Lasmigona sp. 1 cf. holstonia</u>				Barrens Toesplitter	
Streams of Barrens Plateau, in soft sediments near bank or in bank below waterline; upper Duck & Caney Fk R; E Highland Rim.				S1	GNR
<u>Lasmigona subviridis</u>	(Conrad, 1835)			Green Floater	
Quiet waters; smaller streams in pools and eddies with gravelly and sandy bottoms; Watauga River upst of Watauga Lake; Blue Ridge.				S2	G3
<u>Lemiox rimosus</u>	(Rafinesque, 1831)			Birdwing Pearlymussel	
Small -medium size rivers in riffle areas with sand and gravel substrates in mod-fast currents; Tennessee River system.	WR, CB, RV	E	<u>LE, XN</u>	S1	G1
<u>Medionidus acutissimus</u>	(I. Lea, 1831)			Alabama Moccasinshell	
Small -large rivers in gravel & cobble shoals in shallow water with mod strong current; Conasauga River; Polk County.	RV	T	<u>LT</u>	S1	G2
<u>Medionidus parvulus</u>	(I. Lea, 1860)			Coosa Moccasinshell	
Highly oxygenated streams & small rivers with moderate to strong flow, in sand and gravel; Conasauga River, Polk County.	RV	E	<u>LE</u>	S1	G1Q
<u>Obovaria jacksoniana</u>	(Friesen, 1912)			Southern Hickorynut	
Rivers with medium-sized gravel substrates and low-mod current; Wolf & Hatchie rivers; Mississippi River watershed; west Tennessee.	CP			S1	G2
<u>Obovaria olivaria</u>	(Rafinesque, 1820)			Hickorynut	
Uses sand or gravel substrates in deep water, lower Cumb & TN R; extremely rare; may be extirp from TN R; lake sturgeon is host sp.				S2?	G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
BIVALVIA (MUSSELS)	Molluscs				
<u>Obovaria retusa</u>	(Lamarck, 1819)				
Large rivers in gravel and sand bars; Tennessee & Cumberl and river watersheds; many historic locations currently inundated.	WR, CB, RV, WU	E	LE, XN	S1	G1
<u>Obovaria subrotunda</u>	(Rafinesque, 1820)				
Medium-large rivers in sand and gravel substrates with moderate flow; TN & Cumb rivers; also Red River in Robertson Co., W Highland River.	WR, CB, RV, SV			S2S3	G4
<u>Pegias fabula</u>	(I. Lea, 1838)				
Cool, clear, high-gradient streams in sand, gravel, and cobble substrates, riffles; portions of Cumberland & upper Tenn. river systems.	ER, WR, RV, CB, CU	E	LE	S1	G1
<u>Plethobasus cicatricosus</u>	(Say, 1829)				
Presumed to inhabit shoals and riffles in large rivers; Tennessee & Cumberland river systems. Very rare & possibly extirpated in TN.	RV, CB, WU	E	LE, XN	S1	G1
<u>Plethobasus cooperianus</u>	(I. Lea, 1834)				
Large rivers in sand-gravel-cobble substrates in riffles and shoals in deep flowing water; Cumberland & Tennessee river systems.	WR, CB, RV, WU	E	LE, XN	S1	G1
<u>Plethobasus cyphyus</u>	(Rafinesque, 1820)				
Large to medium-sized rivers, in riffles and coarse sand/gravel substrates; TN & Cumb river systems incl KY Reservoir; W Uplands & Rim.	RV, CB, WU		LE	S2S3	G3
<u>Pleurobema chattanoogaense</u>	(I. Lea, 1858)				
Inhabits riffle areas with substrates of coarse sand and gravel; Conasauga River; Bradley & Polk counties.	RV			S1?	G1Q
<u>Pleurobema clava</u>	(Lamarck, 1819)				
Small/medium-sized rivers and streams; deeply buried in sand/fine gravel or in clean, coarse sand/gravel runs; Lower Cumb. & Tenn. rivers.	WR, CB, WU	E	LE	SH	G1G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
BIVALVIA (MUSSELS)	Molluscs				
Pleurobema georgianum	(I. Lea, 1841)				Southern Pigtoe
High quality small rivers & large streams; shoals and runs with stable sandy-gravel substrates; Conasauga River; Polk & Bradley cos.	RV, BR	E	LE	S1	G1
Pleurobema hanleyianum	(I. Lea, 1852)				Georgia Pigtoe
Medium sized rivers with good current and coarse sand/gravel substrates; Conasauga River; Bradley & Polk counties.	BR		LE	S1	G1
Pleurobema johannis	(I. Lea, 1859)				Alabama Pigtoe
Medium sized rivers with good current and coarse sand/gravel substrates; Conasauga River; Polk County.				SX	GX
Pleurobema oviforme	(Conrad, 1834)				Tennessee Clubshell
Small, shallow streams & rivers with good current & coarse gravel/sand substrates; Tennessee & Cumberland river systems.	WR, ER, CB, RV, CU, BR			S2S3	G2G3
Pleurobema perovatum	(Conrad, 1834)				Ovate Clubshell
Sand/gravel shoals and runs of small rivers and large streams with moderate current; Conasauga River; Polk County.	RV	E	LE	SH	G1
Pleurobema plenum	(I. Lea, 1840)				Rough Pigtoe
Medium to large rivers in sand, gravel, and cobble substrates of shoals; Tennessee & Cumberland river systems.	WR, CB, RV, WU	E	LE, XN	S1	G1
Pleurobema rubrum	(Rafinesque, 1820)				Pyramid Pigtoe
Rivers with strong current and firm sand/gravel substrates; TN & Cumb river systems incl KY Reservoir; W Uplands & W Highland Rim.	RV, CB, WU			S1S2	G2G3
Pleurobema troschelianum	(I. Lea, 1852)				Alabama Clubshell
Medium sized rivers with good current and coarse sand/gravel substrates; Conasauga River; Bradley & Polk counties.				S1	G1Q

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK	
Invertebrate Animal						
BIVALVIA (MUSSELS)	Molluscs					
<u>Pleuronaia dolabelloides</u>	(I. Lea, 1840)					
Lg creeks to mod sized rivers, in riffles/shoals of sand, fine gravel, and cobble substrates with mod current; Tennessee R watershed.	WR, ER, CB, RV, SV, BR	LE	Slabside Pearlymussel	S2	G2	
<u>Pleuronaia gibberum</u>	(I. Lea, 1838)					
Shallow areas in small -medium rivers in riffles with sand and gravel substrates; trib of Cumberland River & poss TN R, middle Tenn.	ER, CB	E	LE	S1	G1	
<u>Ptychobranchus foremanianus</u>	(I. Lea, 1842)					
Medium sized rivers with good current and coarse sand/gravel substrates; Conasauga River; Bradley & Polk counties.	RV, BR	E	LE	S1	G1	
<u>Ptychobranchus subtentum</u>	(Say, 1825)					
Small -medium rivers in swift current or riffles, in sand, gravel, and cobble substrates; Tennessee & Cumberland river systems.	ER, RV, CB	LE	Fluted Kidneyshell	S2	G2	
<u>Quadrula cylindrica cylindrica</u>	(Say, 1817)					
Large rivers in sand and gravel; Tennessee & Cumberland systems; big river form of Q. cylindrica.	WR, CB, RV, WU	LT	Rabbitsfoot	S3	G3G4T3	
<u>Quadrula cylindrica strigillata</u>	(Wright, 1898)					
Small -medium sized rivers, in clear, shallow riffles with sand-gravel substrates; Tenn. & Cumb. river systems; upland form.	RV	E	LE	S2	G3G4T2	
<u>Quadrula fragosa</u>	(Conrad, 1835)					
Medium-large size rivers, in riffles with mud, sand, and gravel; lower Tenn & Cumb river systems; Central Basin, W Uplands & W Rim.	E	LE	Winged Mapleleaf	S1	G1	
<u>Quadrula intermedia</u>	(Conrad, 1836)					
Shallow riffle and shoal areas of headwater streams and bigger rivers, in coarse sand/gravel substrates; Tennessee River system.	RV, CB	E	LE, XN	Cumberland Monkeyface	S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
BIVALVIA (MUSSELS) <u>Quadrula sparsa</u>	Molluscs (I. Lea, 1841)			Appalachian Monkeyface	
Headwater sections of rivers in shallow riffles/runs with sand-gravel substrate & moderate current; upper Tennessee River drainage.	RV, CB	E	<u>LE, XN</u>	S1	G1
<u>Simpsonaias ambigua</u>	(Say, 1825)			Salamander Mussel	
In sand or silt under large, flat stones in areas of swift current; occurred historically in E Fork Stones R; 2005 obs in Lower Duck R.	WR, ER, CB			S1	G3
<u>Strophitus connsaugaensis</u>	(I. Lea, 1858)			Alabama Creekmussel	
Small -medium sized rivers, in shallow areas with current and substrates of fine gravel, sand, & silt; Conasauga River; Polk County.	RV, BR			S1	G3
<u>Toxolasma cylindrellus</u>	(I. Lea, 1868)			Pale Lilliput	
Small tributary rivers & streams, in firm rubble, gravel, and sand substrates in shallow riffles and shoals; Lower Tenn. River system.	ER, WR, CB, SV, CU	E	<u>LE</u>	S1	G1
<u>Toxolasma lividus</u>	(Rafinesque, 1831)			Purple Lilliput	
Small -medium sized rivers & lg creeks, in mud, sand, & gravel substrates; Tenn. & Cumberland river systems in headwater areas.	ER, CB, RV, CU			S1S2	G3Q
<u>Uniomerus declivis</u>	(Say, 1831)			Tapered Pondhorn	
Typically found buried in a substrate of fine sand and mud in shallow sloughs and ditches; reported only from Hatchie R system.	CP			S2	G5Q
<u>Villosa fabalis</u>	(I. Lea, 1831)			Rayed Bean	
Riffles of medium-small rivers & creeks, in gravel & sand substrates associated with Justicia americana; Tennessee River watershed.	CB, RV		<u>LE</u>	S1	G2
<u>Villosa nebulosa</u>	(Conrad, 1834)			Alabama Rainbow	
Creeks-medium size rivers in sand/gravel riffles in mod current; assoc. with Justicia americana; Conasauga R system; Ridge & Valley.	BR			S2	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Invertebrate Animal					
BIVALVIA (MUSSELS)	Molluscs				
<u>Villosa perpurpurea</u>	(I. Lea, 1861)			Purple Bean	
Creeks to medium-sized rivers, headwaters, in riffles with coarse sand & gravel & some silt; upper Tennessee River watershed.	RV, CU	E	<u>LE</u>	S1	G1
<u>Villosa trabalis</u>	(Conrad, 1834)			Cumberland Bean	
Riffle areas of small rivers & streams in sand, gravel, & cobble substrates with swift current; upper Cumb. & upper Tenn. river systems.	ER, CB, RV, BR, CU	E	<u>LE, XN</u>	S1	G1
<u>Villosa vanuxemensis umbrans</u>	(I. Lea, 1857)			Coosa Creekshell	
Riffles of headwater creeks/small rivers in gravel /sand subst.; often assoc. with <i>Justicia amer.</i> ; Conasauga R drainage; Ridge & Valley.	BR			S2	G2
<u>Villosa vibex</u>	(Conrad, 1834)			Southern Rainbow	
Mud or soft sand in small rivers & creeks in areas with moderate current; Conasauga, Hatchie, and Wolf (Miss. R.) river systems.	RV, CP, BR			S2	G5Q
GASTROPODA (AQUATIC SNAILS)	Molluscs				
<u>Atheurnia anthonyi</u>	(Redfield, 1854)			Anthony Riversnail	
Larger rivers and downstream stretches of lg creeks, on cobble/boulder substrates adj. riffles; portions of upper TN River basin.	RV, SV, CU	E	<u>LE, XN</u>	S1	G1
<u>Elimia acuta</u>	(I. Lea, 1831)			Acute Elimia	
Bedrock and slabs in moderate to fast current; tributaries of lower Tennessee River; southern Tennessee.				S1	G2
<u>Elimia arachnoidea</u>	(Anthony, 1854)			Spider Elimia	
Small streams of the Ridge & Valley; east Tennessee; reported from Knox & Monroe counties; Tennessee River basin.				S2	G2G3
<u>Elimia aterina</u>	(I. Lea, 1863)			Coal Elimia	
In gravel /cobble of springs & small shallow streams of upper Tennessee River system; Claiborne & Hancock counties.				S1	G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (AQUATIC SNAILS)	Mulluscs				
<u>Elmia christyi</u>	(I. Lea, 1862)				A Freshwater Snail
Found in the Hiwassee River and tributaries; southeast Tennessee.	RV, BR			S2	G2
<u>Elmia interrupta</u>	(Hal deman, 1840)				Knotty Elimia
Limited distribution in streams of Nashville basin, Cumberland River watershed.				S1	G1
<u>Elmia interveniens</u>	(I. Lea, 1862)				Slowwater Elimia
Restricted to tributaries of the lower Tennessee River in northern Alabama and also reported from Shoal Creek, Lawrence County, TN.				S1	G2
<u>Elmia porrecta</u>	(I. Lea, 1863)				Nymph Elimia
Springs and streams of Claiborne County & NW Ridge & Valley; Tennessee River watershed.				S2	G2
<u>Elmia striatula</u>	(I. Lea, 1842)				File Elimia
Reported from springs in Monroe County & a reservoir in Bradley County; Tennessee River watershed; distribution unclear.				S2	G2
<u>Elmia strigosa</u>	(I. Lea, 1841)				Brook Elimia
Streams of the Clinch and Powell River basins, northern Ridge & Valley; may be synonymous with <i>E. porrecta</i> .				S2	G2
<u>Elmia teres</u>	(I. Lea, 1841)				Elegant Elimia
Small streams of Walden Ridge, flowing eastward; Ridge & Valley; Tennessee River watershed; may be synonymous with <i>E. strigosa</i> .				S1	G1
<u>Elmia troostiana</u>	(I. Lea, 1838)				Mossy Elimia
Tributaries of the Tennessee River, Jefferson & Knox counties; Ridge & Valley; may be synonymous with <i>E. arachnoidea</i> .				S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (AQUATIC SNAILS)	Mulluscs				
<u>Io fluvialis</u>	(Say, 1825)				Spiny Riversnail
Shallow waters of shoals that are rapid to moderate and well-oxygenated; Tennessee River & main tributaries; E Tennessee.	RV, SV, CU			S2	G2
<u>Leptoxis umbilicata</u>	(Wetherby, 1876)				Umbilicate Rocksnail
Medium sized rivers & large creeks in portions of lower Cumb. and Tenn. river systems; Stones River; possibly a form or morph.	ER, CB			S1	G1Q
<u>Leptoxis virgata</u>	(I. Lea, 1841)				Smooth Mudalia
Medium to large rivers, on shoals; portions of upper TN River and some larger tributaries; Hiwassee River.	SV, BR			S1	G2
<u>Lithasia armigera</u>	(Say, 1821)				Armored Rocksnail
Partially buried logs, gravel, and preferably submerged rock outcrops; Lower Cumberland River & larger tributaries; Obey River.	ER, CB, SV			S1S2	G3G4
<u>Lithasia duttoniana</u>	(I. Lea, 1841)				Helmet Rocksnail
Rocky substrates in riffle systems; bedrock in flowing water below main section of riffles; Duck River (TN River system).	WR, ER, CB			S2	G2Q
<u>Lithasia geniculata</u>	Hal demand, 1840				Ornate Rocksnail
Big river form of L. geniculata; Lower Cumberland River & large tributaries to Lower Tennessee River.	WR, ER, CB, RV, WU, CU			S2	G3Q
<u>Lithasia geniculata fuliginosa</u>	(Lea, 1841)				Geniculate River Snail
Medium-sized river form of L. geniculata; portions of Lower Cumberland and Lower Tennessee river systems; Duck & Buffalo rivers.	WR, ER, CB			S2	G3T3Q
<u>Lithasia geniculata pinguis</u>	(Lea, 1852)				Small Geniculate River Snail
Headwater form of L. geniculata, in small rivers and large streams, on gravel substrates; upper Duck & Caney Fork systems.	ER, CB			S2	G3T3Q

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
GASTROPODA (AQUATIC SNAILS)	Mulluscs					
<u>Lithasia lima</u>	(Conrad, 1834)					
Rocky substrates in riffle systems; Elk River & larger tributaries (Tennessee River watershed).	ER, CB, SV				S2	G2Q
<u>Lithasia salebrosa</u>	(Conrad, 1834)					
Formerly occurred in portions of lower Cumberland and lower Tennessee systems; may be limited to dam tailwaters currently.	WR, CB, WU				S2	G2G3Q
<u>Lithasia spicula</u>	Minton, Savarese, and Campbell, 2005					
Shoals, algae covered rocks, & gravel in a short segment of the Harpeth River (Cumberland River trib); Davidson & Cheatham counties.					S1	G1Q
<u>Lithasia verrucosa</u>	(Rafinesque, 1820)					
Rocky shoals/riffles in mod current @ depths to several feet; relict populations in some larger upper Tennessee River tributaries.	WR, RV, CB, WU, SV, BR, CU				S3	G4Q
<u>Marstonia ogmorhaphe</u>	(F. G. Thompson, 1977)					
Known from shallow littoral zone of two cave spring runs, on mixed substrate of mud, sand, & detritus; Lower Seq. R.; Marion County.	SV	E	LE		S1	G1
<u>Pleurocera alveare</u>	(Conrad, 1834)					
Reported from Lower Cumberland River and its larger tributaries.					S2	G3
<u>Pleurocera corpulenta</u>	Anthony, 1854					
Extremely limited distribution in Tennessee River from Battle Creek at Ketchall (Kimbail), Marion County, Tennessee, downstream.	SV				S1	G1
<u>Pleurocera curta</u>	(Haldeman, 1841)					
Upper Tennessee River & larger tributaries; east Tennessee; status uncertain.					S2	G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (AQUATIC SNAILS)	Mulluscs				
<u>Pleurocera gradata</u>	(Anthony, 1854)			Bottle Hornsnail	
Reported from upper Holston River (Tennessee River watershed); Ridge & Valley; NE Tennessee.		S2?		G1G2	
<u>Pleurocera nobilis</u>	(I. Lea, 1845)			Noble Hornsnail	
Reported from lower Sequatchie River and Little Sequatchie River (Tennessee River system); Marion County.		S1		G2	
<u>Pleurocera trochiformis</u>	(Conrad, 1834)			Sulcate Hornsnail	
Reported from lower Tennessee River watershed, including Duck & Elk rivers & Shoal Creek; habitat poorly known.		S2		G2	
<u>Pleurocera walkeri</u>	Goodrich, 1928			Telescope Hornsnail	
Reported from Sequatchie & Little Sequatchie rivers & some tributaries (Tennessee River watershed); Marion County.		S2		G3	
<u>Rhodacme elatior</u>	(Anthony, 1855)			Domed Ancylid	
Moderate to fast current under slabs and boulders; Tennessee River watershed; distribution poorly known.		S1		G1	
<u>Rhodacme hinkleyi</u>	(Walker, 1908)			Knobby Ancylid	
Tennessee River watershed; habitat & distribution poorly known.		S2S3		G2G3	
<u>Somatogyrus aureus</u>	Tryon, 1865			Golden Pebblesnail	
Reported from Tennessee River system; habitat and distribution poorly understood; one contemporary record in Marion Co.	SV			S1	G1
<u>Somatogyrus parvulus</u>	Tryon, 1865			Sparrow Pebblesnail	
Upper Tennessee River system; probably on rocks in fast moving water; reported from Powell & Holston rivers historically.		S1?		G1G2Q	

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (AQUATIC SNAILS) <u>Somatogyrus sp. 2</u>	Mulluscs			Hiwassee Pebblesnail	
Known from the "dewatered" section of the Hiwassee River upstream of the Appalachia Powerhouse; on rocks in free-flowing water.	BR			S1	G1Q
<u>Somatogyrus tennesseensis</u>	Walker, 1906			Opaque Pebblesnail	
Known only from Shoal Creek (Tennessee River tributary); Tennessee report may be erroneous; species may be extirpated.				S1	G1
GASTROPODA (LAND SNAILS)					
<u>Anguispira alabama</u>	(G. H. Clapp, 1920)			Alabama Tigersnail	
A calciophile; limestone outcrops and cliff faces of karstic woods; southern Cumberlands.	ER, SV, CU			S2	G2
<u>Anguispira jessica</u>	Kutchka, 1938			Mountain Disc	
Higher elevations in the southern Appalachians, arboreal; also inhabits rotting wood; Roan Mountain & Mt. Le Conte.	RV, BR			S3	G3G4
<u>Anguispira knoxensis</u>	(Pilsbry, 1899)			Rustic Tigersnail	
Rich woods of the Blue Ridge Mountains and adj. Ridge & Valley; Blount, Knox, & Monroe counties.				S1S2	G1G2
<u>Anguispira kochi</u>	(Pfeiffer, 1821)			Banded Tigersnail	
Rotting leaves & decaying logs in rich woods; river bluffs; northwest Tennessee.				S2?	G5
<u>Anguispira picta</u>	(G. H. Clapp, 1920)			Painted Tigersnail	
A calciophile; limestone outcrops and cliff faces of karstic woods; S Cumberlands; Sherwood community of upper Crow Creek valley.	CU	E	LT	S1	G1
<u>Carychium stygium</u>	Call, 1897			Cave Thorn	
Cave obligate; feeds on cricket guano; Highland Rim & escarpment of Cumberland Plateau.	WR, ER, CU			S2	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (LAND SNAILS)	Mulluscs				
<u>Daedalochila auriformis</u>	(Bl and, 1859)				Rockpile Liptooth
Wet, grassy habitats, generally in full sun; barrens & remnant prairies; Coffee & Warren counties; disjunct from central Alabama.		ER		S1	G4
<u>Discus bryanti</u>	(Harper, 1881)				Sawtooth Disc
Leaf litter in rocky upland woods, under rotting logs; northeast Tennessee; Blue Ridge.		BR		S1S2	G3
<u>Discus clappi</u>	(Pilsbry, 1924)				Channelled Disc
A calciphile; leaf litter on rocky wooded hillsides & karst woods; southern Cumberlands; Franklin County.		ER		S1	G1
<u>Euchemotrema fraternum montanum</u>	(Archer, 1939)				A Terrestrial Snail
On logs, in leaf litter, or under stones on mountainsides & in ravines; oak-hickory forests of the S Blue Ridge; far southeast Tenn.		BR		S2	G5T2
<u>Fumonelix archeri</u>	(Pilsbry, 1940)				Ocoee Covert
In leaf litter or under rock ledges; rich woods north and south of Ocoee River, Cherokee National Forest, Polk County.		BR		S1	G1
<u>Fumonelix christyi</u>	(Bl and, 1860)				Glossy Covert
Leaf litter in upland oak woods; central and southernmost Blue Ridge; southeast Tennessee.		BR		S2	G3
<u>Fumonelix jonesiana</u>	(Archer, 1938)				Big-tooth Covert
In leaf litter or talus of birch-beech woods at higher elevations; central Appalachians; Great Smoky Mountains National Park.				S1	G1
<u>Fumonelix wetherbyi</u>	(Bl and, 1873)				Clifty Covert
Under logs & moist leaf litter of wooded hillsides & ravines; northern Cumberlands, Cumberland Mountains & adj. Ridge & Valley.		ER		S2S3	G2G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (LAND SNAILS)	Mulluscs				
<u>Fumonelix wheatleyi</u>	(Bl and, 1860)				Cinnamon Covert
Leaf litter, logs, talus in mixed woodlands, coves @ mid-upper elevations of Blue Ridge; Blount, Carter, Cocke, Monroe, & Sevier cos.		BR		S3	G4
<u>Fumonelix wheatleyi clingmanicus</u>	(Pilsbry, 1904)				Clingman Covert
Mid-upper elevation forests under rocks, logs, leaf litter; Blue Ridge; Carter, Cocke, Sevier, Unicoi counties.				S2	G4T2T3
<u>Glyphyalinia junaluskana</u>	(Clench and Banks, 1932)				Dark Glyph
Moist leaf litter in deciduous woods on mountainsides; southern Blue Ridge; Monroe County.				S2	G2
<u>Glyphyalinia ocoae</u>	Hubricht, 1978				Blue-gray Glyph
Leaf litter on wooded hillsides & ravines; southernmost Blue Ridge; Polk County.		BR		S1	G1
<u>Glyphyalinia pentadelphia</u>	(Pilsbry, 1900)				Pink Glyph
Pockets of moist leaves in rich upland woods; mid-elevations of Blue Ridge; southeast Tennessee.		BR		S2	G2G3
<u>Glyphyalinia rimula</u>	Hubricht, 1968				Tongued Glyph
Moist leaf litter on wooded hillsides & ravines; sometimes a cave assoc.; karst areas of the E portion of northern middle Tennessee.				S2S3	G3
<u>Haplotrema kendeighi</u>	Webb, 1951				Blue-footed Lancetooth
Leaf litter above 2,000 ft; S Blue Ridge; Blount, Sevier, and Monroe counties.				S2	G2
<u>Helicodiscus aldrichianus</u>	(G. H. Clapp, 1907)				Burrowing Coil
A burrowing species found under stones, in chert rubble, or deep pockets of leaf litter; reported from Marion & Franklin counties.				S2S3	G3

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
GASTROPODA (LAND SNAILS)	Mulluscs					
Helicodiscus bonamicus	Hubricht, 1978				S1	G1
Found in leaf litter on wooded hillsides; southern Blue Ridge mountains; SE Tennessee.						
Helicodiscus fimbriatus	Wetherby, 1881					Fringed Coil
In leaf litter or under rocks on wooded hillsides; southern Blue Ridge; southeast Tennessee.		BR			S3	G4
Helicodiscus hadenoecus	Hubricht, 1962					Cricket Coil
Cave obligate; feeds on cricket guano; Eastern Highland Rim & Cumberland Plateau.		ER, CU			S3	G3
Helicodiscus hexodon	Hubricht, 1962					Toothy Coil
In leaf litter of forested hillsides; escarpment to Walden Ridge from Sequatchie Valley; Cumberland Plateau; Bedsoe County.		CU			S1	G1
Helicodiscus notius specus	Hubricht, 1962					A Terrestrial Snail
Cave obligate; feeds on cricket guano; Ridge & Valley and Eastern Highland Rim (tentatively).		ER, RV			S1?	G5T2
Helicodiscus punctatellus	Morrison, 1942					Punctate Coil
Limestone talus deposits, Eastern Highland Rim; Jackson County; known from Pleistocene fossil specimens; may not be extant in TN.		ER			S1	G1
Inflectarius ferrissi	(Pilsbry, 1897)					Smoky Mountain Covert
Under rock ledges, rock piles, or logs at mid-elevations and higher; Blue Ridge; Great Smoky Mountains National Park.		BR			S2	G2
Inflectarius smithi	(G. H. Clapp, 1905)					Alabama Shagreen
A calciphile; karst woods, hillsides, ravines; under logs and rocks; southern Cumberlands; Franklin County.		CU			S2	G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (LAND SNAILS)	Mulluscs				
<u>Inflectarius subpalliatus</u>	(Pilsbry, 1893)				Velvet Covert
Leaf litter, rotting logs, talus in mixed woodland; may be arboreal; mid to upper elevations of Blue Ridge; Carter & Union counties.		BR		S2	G2
<u>Megapallifera wetherbyi</u>	(W. G. Binney, 1874)				Blotchy Mantleslug
Terrestrial; on rocks and trunks of smooth-barked trees; river bluffs and ravines; Cumberland Plateau.				S2	G2G3
<u>Mesodon altivagus</u>	(Pilsbry, 1900)				Wandering Globe
Found on the ground in high-elevation spruce-fir forests; GSMNP; S Blue Mountains.				S2	G2G3
<u>Mesodon andrewsae</u>	(W. G. Binney, 1879)				Balsam Globe
Found crawling on the ground at high elevations in S Appalachians; reported above 4500 ft in mixed forests of Roan Mountain.				S2S3	G3
<u>Mesodon mitchellianus</u>	(I. Lea, 1839)				Sealed Globelet
Meadows, roadsides, floodplains; northern Ridge & Valley; reported from Knox County.				S2	G4
<u>Mesodon sanus</u>	(Clench and Archer, 1933)				Squat Globelet
A calciphile; in leaf litter of karst woods, hillsides, ravines; southern Cumberlands; Franklin & Marion counties.	CU			S2S3	G3
<u>Mesomphix rugeli</u>	(W. G. Binney, 1879)				Wrinkled Button
Under leaf litter on wooded hillsides; far NE Tennessee; S Blue Ridge.	BR			S3	G4
<u>Oxyloma salleanum</u>	(Pfeiffer, 1849)				Louisiana Ambersnail
Uses low, wet habitats in marshes or pond margins; found crawling on mud or on emergent plants such as cattails; Mississippi River corridor; W Tennessee.				S2S3	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (LAND SNAILS) <u>Pallifera hemphilli</u>	Mulluscs (W. G. Binney, 1885)	BR		S2S3	G4
Spruce-fir forests above 5,000 ft; S Blue Ridge; Carter, Cocke, & Sevier counties.					
<u>Paravitrea alethia</u>	Hubricht, 1978			Goddess Supercoil	
In leaf litter of forested ravines; Ridge & Valley; reported from Roane County.				S1	G1
<u>Paravitrea andrewsae</u>	(W. G. Binney, 1879)			High Mountain Supercoil	
Moist leaf litter on forested mountainsides; northern Blue Ridge; Carter & Unicoi counties.				S2	G2
<u>Paravitrea calcicola</u>	H. B. Baker, 1931			Pearl Supercoil	
A calciphile; under moist leaf litter of rocky karst woods, hillsides, ravines; near springs; Franklin & Marion counties.				S1	G1
<u>Paravitrea clappi</u>	(Pilsbry, 1898)			Mirey Ridge Supercoil	
In moist leaf litter generally above 5,000 ft; Blue Ridge; Blount & Sevier counties; Great Smoky Mountains NP.	BR			S2S3	G2G3
<u>Paravitrea lamellidens</u>	(Pilsbry, 1898)			Lamellate Supercoil	
Deep, moist leaf litter below boulder slopes, bluffs; boggy seeps; forested hillsides & ravines; central & southern Blue Ridge.	BR			S2	G2
<u>Paravitrea lapilla</u>	Hubricht, 1965			Gem Supercoil	
Under moist leaf litter on forested hillsides & ravines, bluffs; northern Central Basin.				S2	G2
<u>Paravitrea pilsbryana</u>	(G. H. Clapp, 1919)			Translucent Supercoil	
A calciphile, found under moist leaf litter on rocky wooded hillsides & ravines in karst; reported from Franklin & Marion counties.				S2	G2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
GASTROPODA (LAND SNAILS)	Mulluscs					
<u>Paravitrea reesei</u>	Morrison, 1937			Round Supercoil		
Under moist leaf litter or rocks on river bluffs or ravines; Blue Ridge of far northeast Tennessee; Johnson County.			S1S2		G3	
<u>Paravitrea significans</u>	(Bl and, 1866)			Domed Supercoil		
Under moist leaf litter on wooded hillsides & ravines; vicinity of Mississippi River; reported from Shelby County.			S1S2		G3	
<u>Paravitrea subtilis</u>	Hubricht, 1978			Slender Supercoil		
Found in leaf litter on wooded hillsides & in ravines; northern Highland Rim & Cumberlands; reported from Macon & Fentress counties.			S2		G2	
<u>Paravitrea ternaria</u>	Hubricht, 1978			Sculpted Supercoil		
Under moist leaf litter of forested hillsides & ravines; Blue Ridge; Union County.			S1S2		G1G2	
<u>Paravitrea tridens</u>	Pilsbry, 1946			White-foot Supercoil		
Moist leaf litter on wooded hillsides; northeast Tennessee; Ridge & Valley and Blue Ridge.		RV, BR			S2	G2
<u>Paravitrea umbilicaris</u>	(Ancey, 1887)			Open Supercoil		
In pockets of deep, moist leaf litter on forested hillsides & ravines; Blue Ridge; southeast Tennessee.		RV, BR			S2?	G2
<u>Paravitrea variabilis</u>	H. B. Baker, 1929			Variable Supercoil		
In pockets of deep, moist leaf litter on forested hillsides & ravines; escarpment of Cumb. Plateau in Sequatchie Valley & Franklin Co.		CU			S2S3	G2G3
<u>Paravitrea varidens</u>	Hubricht, 1978			Roan Supercoil		
In leaf litter of forested mountain sides; brambles @ high elevation; northern Blue Ridge; Carter County.			S1S2		G1G2	

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
GASTROPODA (LAND SNAILS)	Mulluscs					
<u>Philomycus sellatus</u>	Hubricht, 1972				Alabama Mantleslug	
Wooded hill sides and ravines, under loose bark of logs, on trunks of smooth-barked trees; southernmost Cumberlands.					S2	G2G3
<u>Philomycus virginicus</u>	Hubricht, 1953				Virginia Mantleslug	
Upland species found in wooded hill sides and ravines, under exfoliating bark of hardwood trees; also arboreal; reported from far NE Tennessee.					S2	G3
<u>Pilsbryna aurea</u>	H. B. Baker, 1929				Ornate Bud	
Deep, wet leaves of karstic forests & hills, near streams; assoc. with limestone/dolomite outcrops; Unicoi, Washington, & Blount cos.		BR			S1	G1
<u>Pilsbryna castanea</u>	H. B. Baker, 1931				Prominent Bud	
Wooded hill sides in deep leaf litter at base of limestone exposures; Sequatchie Valley & S. Cumberlands; Edsoe & Marion cos.					S2	G2
<u>Pilsbryna nodopalma</u>	Slapciensky and Coles, 2004				Oar Tooth Bud	
On wooded, rocky hill sides in moist leaf-litter or on relatively dry rock outcrops; Blue Ridge mountains; NE TN border with NC.					S1	G1G2
<u>Pilsbryna quadrilamellata</u>	Slapciensky and Coles, 2004				Four Blade Bud	
In leaf litter associated with sandstone talus slope adj. Nolichucky River; reported only from Unaka Springs, Unicoi County.					S1	G1
<u>Pilsbryna vanattai</u>	(Walker and Pilsbry, 1902)				Honey Glyph	
Moist leaf litter in ravines, wooded mountain sides, adj. seeps, springs, small streams; northern Blue Ridge; northeast Tennessee.		BR			S2S3	G2G3
<u>Praticolella lawae</u>	(J. Lewis, 1874)				Appalachian Shrubsail	
Favors open pine woods, clearings, and glades, usually on sandy soil; reported from far SE Tennessee.					S2	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (LAND SNAILS)	Mulluscs				
<u>Stenotrema altispira</u>	(Pi lsbry, 1894)				Highland Slitmouth
Leaf litter, logs, talus in mixed woodland, spring fed slopes; higher elevations of central & N Blue Ridge; northeast Tennessee.	BR			S2?	G3
<u>Stenotrema angellum</u>	Hubricht, 1958				Kentucky Slitmouth
Found under logs and leaf litter of forested hillsides and ravines; northern Eastern Highland Rim.	ER			S3	G4
<u>Stenotrema barbigerum</u>	(Redfield, 1856)				Fringed Slitmouth
On logs on forested hillsides & ravines; far SE Tennessee; Blue Ridge and Ridge & Valley.	BR			S3?	G3G4
<u>Stenotrema cohuttense</u>	(G. H. Clapp, 1914)				Cohutta Slitmouth
In leaf litter of forested hillsides & ravines; far SE Tennessee; S Blue Ridge; Polk County.	RV, BR			S2	G2
<u>Stenotrema depilatum</u>	(Pi lsbry, 1895)				Great Smoky Slitmouth
Leaf litter, logs, talus in mixed woodland, spring fed slopes; higher elevations of central Blue Ridge; GSMNP.				S2	G2
<u>Stenotrema edgarianum</u>	(I. Lea, 1841)				Sequatchie Slitmouth
On logs and in leaf litter on forested hillsides; southern Sequatchie Valley extending north to Crab Orchard.	CU			S2S3	G2G3
<u>Stenotrema exodon</u>	(Pi lsbry, 1900)				Alabama Slitmouth
A calciphile; found on and about limestone rocks in hilly karst woods; southernmost Cumberlands.				S2	G2
<u>Stenotrema pilula</u>	(Pi lsbry, 1900)				Pygmy Slitmouth
Found under logs and in leaf litter on dry forested hillsides; Blue Ridge; GSMNP.	BR			S3	G3G4

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
GASTROPODA (LAND SNAILS)		Mulluscs				
<u>Stenotrema waldense</u>	Archer, 1938				Doaks Creek Slitmouth	
A calciphile; reported in the vicinity of springs of NW Ridge & Valley; Campbell & Claiborne cos; probably uses limestone outcrops.				S2		G2
<u>Striatura exigua</u>	(Stimpson, 1850)				Ribbed Striate	
Moist leaf litter of forested slopes; Blue Ridge; a northern species that apparently follows the spine of the Appalachians south.		BR		S1		G5
<u>Triodopsis anteridon</u>	Pilsbry, 1940				Carter Threetooth	
In leaf litter or on logs on forested slopes and in ravines; Blue Ridge; far northeast Tennessee.		BR		S1S2		G3
<u>Triodopsis claibornensis</u>	Lutz, 1950				Claiborne Threetooth	
In leaf litter of rocky karst woods and on roadsides, NW Ridge & Valley; Claiborne & Campbell counties.		RV		S2		G2
<u>Triodopsis complanata</u>	(Pilsbry, 1898)				Glossy Threetooth	
Cave associate; also found in leaf litter or around logs or talus; northernmost Cumberlands.		ER		S2		G2
<u>Ventridentes coelaxis</u>	(Pilsbry, 1899)				Bidentate Dome	
In leaf litter on mountainsides, often at higher elevations; northernmost Blue Ridge and Ridge & Valley.		RV, BR		S2S3		G3
<u>Ventridentes decussatus</u>	(Walker and Pilsbry, 1902)				Crossed Dome	
In leaf litter of oak woods, usually above 3,000 ft; Blue Ridge.		RV, BR		S2?		G3
<u>Ventridentes eutropis</u>	Pilsbry, 1946				Carinate Dome	
Under leaf litter or limestone slabs in upland oak woods; middle Tennessee; northern Highland Rim.				S2S3		G2G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
GASTROPODA (LAND SNAILS)	Mulluscs				
<u>Vertigo bollesiana</u>	(E. S. Morse, 1865)				Delicate Vertigo
In leaf litter of forested hill sides or wet meadows at high elevation; central and northern Blue Ridge of E Tennessee.				S2	G4
<u>Vertigo clappi</u>	Brooks and Hunt, 1936				Cupped Vertigo
In leaf litter and moss on forested hill sides; Blue Ridge; Monroe County.	ER, RV, BR			S1	G1G2
<u>Vertigo parvula</u>	Sterki, 1890				Smallmouth Vertigo
In leaf litter and on logs in upland forests with limestone outcrops or talus; Blue Ridge; Washington & Union counties.	BR			S2S3	G3
<u>Vertigo pygmaea</u>	(Draparnaud, 1801)				Crested Vertigo
A calciphile; generally found in low, grassy habitats; Grassy Cove & Crab Orchard; Cumberland County.	CU			S1	G5
<u>Vertigo rugosula</u>	Sterki, 1890				Striate Vertigo
Grassy roadsides and cedar glades; dry karst habitats; middle Tennessee.				S2	G4
<u>Vertigo teskeyae</u>	Hubricht, 1961				Swamp Vertigo
Wet habitats, pond margins, swamps, muddy bottomlands; tributary creeks of lower Tennessee River.	WR, WU			S1	G5
<u>Webbhelix multilineata</u>	(Say, 1821)				Striped Whelip
Low wet habitats, marshes, floodplains, meadows; lake margins; under leaf litter or drift; Mississippi River floodplain.	CP, MF			S2	G5
<u>Zonitoides lateumbilicatus</u>	(Pilsbry, 1895)				Striate Gloss
A calciphile; found in leaf litter of shady karst woods, ravines; sometimes near springs or seeps; spotty distribution in Cumberland.	ER, CU			S2?	G3G4

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
GASTROPODA (LAND SNAILS)	Mulluscs					
<u>Zonitoides patuloides</u>	(Pilsbry, 1895)				Appalachian Gloss	
In pockets of deep moist leaf litter on mountainsides, ravines; Blue Ridge; Great Smoky Mountains National Park.			S2		G3	
ANNELIDA (SEGMENTED WORMS)	Other Types					
<u>Cambarincola alienus</u>	Holt 1963				A Cave Obligate Worm	
Aquatic cave obligate; isopod parasite; southern Appalachians.		ER			S1	G1G2
<u>Cambarincola leptadenus</u>	Holt 1973				A Cave Obligate Worm	
Aquatic cave obligate; crayfish parasite (known from <i>Cambarus tenebrosus</i>); Western Highland Rim.		WR			S1	G1G2
<u>Cambarincola marthae</u>	Holt 1973				A Cave Obligate Worm	
Aquatic cave obligate; isopod parasite; northern Central Basin abutting Eastern Highland Rim.		CB			S1	G1G2
<u>Eremidrilus allegheniensis</u>	(Cook, 1971)				A Cave Obligate Worm	
Aquatic cave obligate; rimstone pools & subterranean waters; reported from S Appalachians; Franklin County.		CU			S1S2	G1G2
DIPLOPODA (MILLIPEDES)						
<u>Brachoria divicuma</u>	Keeton, 1965				A Millipede	
Reported from a mountain side, Cumberland Plateau escarpment west of Jamestown; known only from Fentress County.					S1	G1G3
<u>Brachoria</u> sp. 3					A Xystodesmid Millipede	
Terrestrial; reported only from Cherokee National Forest, Greene County; S Appalachians.					S1	G1
<u>Chaetaspis mollis</u>	(Causey, 1959)				A Cave Millipede	
Terrestrial cave obligate; central Cumberland Plateau; Van Buren County.		ER, CU			S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
DIPLOPODA (MILLIPEDES) <u>Chaetaspis sp. 1</u>	Other Types		A Cave Millipede From Thunder Run Cave (TN)		
Terrestrial cave obligate; wet caves of central Cumberland and Plateau; Van Buren County; known from a single cave at present.	ER			S1	G1
<u>Delophon holti</u>	Shelley, 1979		A Millipede		
Terrestrial; moist, wooded sinkholes in karst; northern Ridge & Valley; Hamblen County.	RV			S1	GNR
<u>Pseudotremia acheron</u>	Shear, 1972		A Cave Obligate Millipede		
Terrestrial cave obligate; caves of the central Cumberland; Warren & Van Buren counties.	ER			S1	G1G2
<u>Pseudotremia barri</u>	Lewis, 2005		A Cave Obligate Millipede		
Terrestrial cave obligate; southern Cumberland; Grundy, Warren, & Franklin counties.				S2	G2
<u>Pseudotremia callae</u>	Lewis, 2009		Baker Cave Milliped		
Terrestrial cave obligate; northern Cumberland; Known from one cave system near Crab Orchard.				S1	G1
<u>Pseudotremia cercops</u>	Shear, 1972		A Cave Obligate Millipede		
Terrestrial cave obligate; Eastern Highland Rim escarpment; reported from Dekalb County.	CB			S1	G1
<u>Pseudotremia deprehensor</u>	Shear, 1972		A Cave Obligate Millipede		
Terrestrial cave obligate; northern Ridge & Valley caves; east Tennessee.	RV			S1?	G2G3
<u>Pseudotremia douglasi</u>	Lewis, 2009		Three Forks Cave Milliped		
Terrestrial cave obligate; northern Eastern Highland Rim; reported from two caves in Overton County.				S1	G1

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal						
DIPLOPODA (MILLIPEDES)	Other Types					
<u>Pseudotremia garlandae</u>	Lewis, 2005					
Terrestrial cave obligate; riparian mud banks in caves of the Northern Cumberland Plateau; Fentress County.	ER, CU				S1	G1
<u>Pseudotremia hollidayi</u>	Lewis, 2005					
Terrestrial cave obligate; collected from riparian mud banks; known from one cave in the Sequatchie Valley of Sequatchie County.					S1	G1
<u>Pseudotremia lethe</u>	Shear, 1972					
Terrestrial cave obligate; wet caves of northern Central Basin abutting Eastern Highland Rim; Jackson County.	CB				S1	G1
<u>Pseudotremia lictor</u>	Shear, 1972					
Terrestrial cave obligate; Eastern Highland Rim; DeKalb County.	CB				S1	G1
<u>Pseudotremia manni</u>	Lewis, 2005					
Terrestrial cave obligate; collected from riparian mud banks in caves of the northern Eastern Highland Rim; Overton County.	ER, CU				S1	G1
<u>Pseudotremia minos</u>	Shear, 1972					
Terrestrial cave obligate; southern Cumberlands; Franklin & Marion counties.					S1	G1
<u>Pseudotremia nodosa</u>	Loomis, 1939					
Terrestrial cave obligate; lower Powell River drainage; upper Ridge & Valley; Clayborne, Hancock, & Union counties.	RV				S2S3	G4
<u>Pseudotremia rhadamanthus</u>	Shear, 1972					
Terrestrial cave obligate; southern Cumberland Plateau; Marion County.	CU				S1	G1G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
DIPLOPODA (MILLIPEDES)	Other Types				
<u>Pseudotremia roebuckorum</u>	Lewis, 2005	ER, CU		S1	G1
Terrestrial cave obligate; collected from riparian mud banks in caves of the N Cumberland Escarpment; Fentress County.					
<u>Pseudotremia sp. 10</u>				Skylight Cave Milliped	
Terrestrial cave obligate; reported from three caves in the Battle Creek drainage of S Cumberlands; Marion County.				S1	G1
<u>Pseudotremia valga</u>	Loomis, 1943			A Millipede	
Terrestrial cave obligate; northernmost Ridge & Valley; Claiborne County.	RV			S1?	G1G2
<u>Pseudotremia wallaceae</u>	Lewis, 2005			Wallace's Cave Millipede	
Terrestrial cave obligate; collected from riparian mud banks in caves of the northern Eastern Highland Rim; Pickett County.	ER			S1	G1
<u>Pseudotremia withersi</u>	Lewis, 2009			A Cave Millipede from Overton County	
Terrestrial cave obligate; reported from five caves in northern Eastern Highland Rim; Overton County.				S1	G1
<u>Scoterpes copei</u>	(Packard, 1881)			A Cave Obligate Millipede	
Terrestrial cave obligate; wet caves of the N Cumberland escarpment; Fentress County.	ER, CU			S1	G3G4Q
<u>Scoterpes ventus</u>	Shear, 1972			A Cave Obligate Millipede	
Terrestrial cave obligate; wet caves of the Cumberland Plateau & Sequatchie Valley.	ER, SV, CU			S1	G3
<u>Tetracion jonesi</u>	Hoffman, 1956			A Cave Obligate Millipede	
Terrestrial cave obligate; reported from three caves in S Cumberlands; Franklin County.	ER, CU			S1S2	G3G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Invertebrate Animal					
TARDIGRADA (WATER BEARS) <u>Calohypsibius schusteri</u>	Other Types			S1	GNR
Beech-maple forests @ high elevations; in mosses on beech trees; Blue Ridge; Carter County.	BR				
<u>Hypsibius roanensis</u>	Nelson and McGlothlin, 1993			A Tardigrade	
Beech-maple forests @ high elevations; in lichen or mosses on beech trees; Roan Mountain; Blue Ridge; Carter County.	BR			S1	GNR
TURBELLARIA (FLATWORMS) <u>Sphalloplana buchanani</u>	(Hyman, 1937)			A Cave Obligate Planarian	
Aquatic cave obligate; northern Central Basin; Davidson County; taxonomy poorly understood.	CB			S1	G1G2
<u>Sphalloplana chandleri</u>	Kenk, 1977			Chandler's Planarian	
Aquatic cave obligate; Central Basin; Davidson County and possibly Cheatham & Rutherford counties.				S1	G1G2
<u>Sphalloplana consimilis</u>	Kenk, 1977			Powell Valley Planarian	
Aquatic cave obligate; Powell River Valley; N Ridge & Valley; Clayborne County.	RV			S1	G2G3
AGNATHA & OSTEICHTHYES (FISH)					
<u>Acipenser fulvescens</u>	Rafinesque, 1817			Lake Sturgeon	
Bottoms of large, clean rivers and lakes.	WR, CB, RV	E		S1	G3G4
<u>Alosa alabamae</u>	Jordan and Evermann, 1896			Alabama Shad	
Large rivers; anadromous.		D		SH	G2G3
<u>Ammocrypta beani</u>	Jordan, 1877			Naked Sand Darter	
Shifting sand bottoms & sandy runs; Hatchie & Wolf rivers & their larger trib.	CP, WU	D		S2	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal AGNATHA & OSTEICHTHYES (FISH)					
Ammocrypta clara Usually in slight to moderate current over sandy bottom; Clinch & Powell rivers.	Jordan and Meek, 1885	RV	T	S1	G3
Ammocrypta vivax Small to medium rivers with sandy substrate; Hatchie & Buffalo rivers.	Hay, 1882	WR, CP, WU	D	S2	G5
Atractosteus spatula Stagnant pools of large rivers, oxbows, swamps, and backwaters; west Tennessee.	(Lacepede, 1803)	WR, CP, WU, MF	D	S1	G3G4
Carpioles velifer Large rivers, mostly in Tennessee River drainage.	(Rafinesque, 1820)	WR, ER, RV, CB, WU, SV, BR	D	S2S3	G4G5
Chrosomus cumberlandensis Small upland tributaries with sand, sandstone, and shale substrates in unsilted conditions; upper Cumberland R. watershed.	(Starnes and Starnes, 1978)	CM	T	LT	S2
Chrosomus saylori Cool 1st-2nd order streams with slabrock and rubble substrate; Walden Ridge of the Cumberland Plateau; Tennessee River watershed.	(Skelton, 2001)	CU	E	LE	S1
Chrosomus sp. cf. saylori Extremely restricted range in few headwater tributaries of Big South Fork Cumberland River and Emory River; Cumberland Plateau; Morgan County.		CU	SC	S1	G1
Chrosomus tennesseensis First order spring-fed streams of woodlands in Ridge and Valley limestone region; Tennessee River watershed.	(Starnes and Jenkins, 1988)	RV, CM, SV, BR, CU	D	S3	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<u>Clinostomus funduloides ssp. 1</u>					Smoky Dace
Upland tributaries of Little Tennessee River; east Tennessee.	BR	D		S1S2	G5T3Q
<u>Cottus sp. 5</u>					Holston Sculpin
Clear streams of moderate gradient containing runs/riffles w/ unsorted gravel, rubble, and boulder substrates; upper Holston River system.				S2	G2
<u>Crystallaria cincotta</u>	Welsh and Wood, 2008				Crystal Darter
Small to medium rivers with expanses of clean sand and gravel; Cumberland River watershed.	CB, CU	D		SX	G1
<u>Cycleptus elongatus</u>	(Lesueur, 1817)				Blue Sucker
Swift waters over firm substrates in big rivers.	WR, RV, CB, CP, WU, MF	T		S2	G3G4
<u>Cyprinella caerulea</u>	(Jordan, 1877)				Blue Shiner
Cool, clear, small to medium-sized rivers over firm substrates.	RV, BR	E	LT	S1	G2
<u>Erimonax monachus</u>	(Cope, 1868)				Spotfin Chub
Clear upland rivers with swift currents & boulder substrates; portions of the Tennessee River watershed.	WR, RV, CU, BR	T	LT, XN	S2	G2
<u>Erimystax cahni</u>	(Hubbs and Crowe, 1956)				Slender Chub
Major headwater tributaries to TN River with small gravel substrates & swift-moderate currents.	RV	T	LT, XN	S1	G1
<u>Etheostoma acuticeps</u>	Bailey, 1959				Sharphead Darter
Strongly flowing water in riffles and chutes of large upland creeks and medium-sized rivers.	RV, BR			S2S3	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
Etheostoma akatulo	Layman and Mayden, 2009			Bluemask (Jewel) Darter	
Streams with slow to moderate current over clean sand and fine gravel; Caney Fork River system (above Great Falls Reservoir).	ER	E	LE	S1	G1
Etheostoma aquali	Williams and Etnier, 1978			Coppercheek Darter	
Primarily in deep riffles, runs, and flowing pools; Duck and Buffalo River watersheds.	ER, WR, CB	T		S2S3	G2G3
Etheostoma baileyi	Page and Burr, 1982			Emerald Darter	
Creeks and small rivers with riffles containing gravel or rubble; upper Cumberland drainage.	CM, CU	D		S2	G4G5
Etheostoma barbouri	Kuehne and Small, 1971			Teardrop Darter	
Sandy pools in small to medium streams with slab rock cover; Barren River watershed.	WR	D		S2	G4G5
Etheostoma barrenense	Burr and Page, 1982			Splendid Darter	
Locally abundant in rocky pools and adjacent riffles of small to moderate streams; Barren River watershed.	WR	D		S3	G4
Etheostoma bellum	Zorach, 1968			Orangefin Darter	
Locally abundant in small to medium-sized clear streams over gravel substrate; Barren River watershed.	WR	D		S3	G4G5
Etheostoma blennius sequatchiense	Burr, 1979			Squatchie Darter	
Swift gravel riffles; Sequatchie River watershed.	SV			S3	G4T3
Etheostoma boschungi	Wall and Williams, 1974			Slackwater Darter	
Gravel-bottomed creeks and small rivers; spawns in seepage water in fields and open woods.	WR, ER, WU	T	LT	S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<u>Etheostoma brevirostrum</u>	Suttkus and Etnier, 1991				Holiday Darter
Bedrock & gravel pools of creeks and small to medium rivers; Conasauga River watershed.	RV, CP, WU, BR	T		S1	G2
<u>Etheostoma cervus</u>	Powers and Mayden, 2003				Chickasaw Darter
Small streams with slow to moderate current and predominantly sandy substrates; Forked Deer River watershed.	CP, WU	D		S2S3	G2G3
<u>Etheostoma cinereum</u>	Storer, 1845				Ashy Darter
Small to medium upland rivers with bedrock or gravel substrate and boulders.	WR, ER, CB, RV, CM, CU, BR	T		S2S3	G2G3
<u>Etheostoma corona</u>	Page and Ceas, 1992				Crown Darter
Rocky pools and adjacent riffles of headwaters, creeks, and small rivers; Cypress Creek watershed.	WR, WU	E		S1S2	G3
<u>Etheostoma denoncourtii</u>	Stauffer and van Sickle, 1997				Golden Darter
Medium to large rivers in shallow riffle areas of pea gravel; Tennessee River system.	WR, RV, CB, SV			S2	G2
<u>Etheostoma ditrema</u>	Ramsey and Suttkus, 1965				Coldwater Darter
Limestone springs and slow spring runs; Conasauga River watershed.	RV	T		S1	G2
<u>Etheostoma forbesi</u>	Page and Ceas, 1992				Barrens Darter
Headwaters of the Barren Fork & Hickory Creek drainages; Cumberland River watershed.	ER, SV	E		S1	G1G2
<u>Etheostoma gutselli</u>	(Hildebrand, 1932)				Tuckasegee Darter
Swift riffle areas with coarse rubble; Little Tennessee & Pigeon rivers.	BR	E		S1	G3G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<u>Etheostoma kantuckeense</u>	Ceas and Page, 1997			Highland Rim Darter	
Upper Barren River system of the Highland River.		WR		S1	G4
<u>Etheostoma lemniscatum</u>	Blanton, 2008			Tuxedo Darter	
Gently flowing, silt-free pools or runs immediately upstream of riffles with cobble, boulders, & slabrock; Big South Fork Cumberland River.		CU	E	LE	S1 G1
<u>Etheostoma luteovinctum</u>	Gilbert and Swain, 1887			Redband Darter	
Limestone streams; Nashville Basin & portions of Highland River.		WR, ER, CB	D	S4	G4
<u>Etheostoma marmorinum</u>	Blanton and Jenkins, 2008			Marbled Darter	
Pools and moderate runs with clean pebbles, cobble, & small boulders; Lower Little River (Tennessee River drainage).		RV	E	LE	S1 G1
<u>Etheostoma microlepidum</u>	Raney and Zorach, 1967			Smallscale Darter	
Small rivers, in deep, strongly flowing riffles with gravel, boulder, and coarse rubble substrates; Cumberland River drainage.		WR, CB, RV	D	S2	G2G3
<u>Etheostoma neopterum</u>	Howell and Dingerkus, 1978			Lollypop Darter	
Small to medium sized, gravelly, cool, spring-fed streams; Shoal Creek watershed.		WR, WU		S1S2	G3
<u>Etheostoma obeyense</u>	Kirsch, 1892			Barcheek Darter	
Small to medium sized, clear upland streams; Eastern Highland and River; Cumberland River drainage.		ER, CB, CU		S3	G4
<u>Etheostoma olivaceum</u>	Braasch and Page, 1979			Sooty Darter	
Small streams with slabrock on limestone bedrock; Nashville Basin tributaries to Cumberland & Lower Caney Fork rivers.		ER, WR, CB	D	S3	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
Etheostoma pseudovulatum	Page and Ceas, 1992			Egg-mimic Darter	
Small to medium sized, gravelly, cool, spring-fed streams; Lower Duck River watershed.	WR	E		S1	G1
Etheostoma pyrrhogaster	Bailey and Etner, 1988			Firebelly Darter	
Sand- and gravel-bottomed pools of headwaters, creeks, and small rivers; upper Coastal Plain in Obion River watershed; west Tennessee.	CP, WU	D		S2	G2G3
Etheostoma sagitta	(Jordan and Swain, 1883)			Cumberland Arrow Darter	
Smaller streams of northern Cumberland Plateau & Cumberland Mountains; Cumberland River watershed.	CM, CU, BR	D		S2	G3
Etheostoma sitikuense	Blanton, 2008			Citico Darter	
Riffles, runs, & pools with cobble & small boulders; larger creeks to medium size rivers; Lower Little Tennessee River watershed.	RV, BR	E	LE, XN	S1	G1
Etheostoma striatum	Page and Braasch, 1977			Striated Darter	
Bedrock pools of headwaters and creeks with large slabrock cover; upper Duck River watershed.	CB	T		S1	G1
Etheostoma susanae	(Jordan and Swain, 1883)			Cumberland Darter	
Creeks in the upper Cumberland River watershed of the Cumberland Mountains; extremely rare.	CM	E	LE	S1	G1G2
Etheostoma tippecanoe	Jordan and Evermann, 1890			Tippecanoe Darter	
Medium to large rivers in shallow riffle areas containing fine cherty gravel; Cumberland River watershed.	WR, CB, CU	D		S1S2	G3G4
Etheostoma trisella	Bailey and Richards, 1963			Trispot Darter	
Shallow water areas along margins of the Conasauga River & some tributaries; Conasauga River watershed.	RV	T		S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	S RANK	G RANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<u>Etheostoma tuscumbia</u>	Gilbert and Swain, 1887			Tuscumbia Darter	
Ponded spring-fed habitats of valley floor springs; Lower Tennessee River; probably extirpated from TN.	WU	D		SX	G2
<u>Etheostoma wapiti</u>	Etnier and Williams, 1989			Boulder Darter	
Fast rocky riffles of small to medium rivers & large creeks; Elk River watershed. Reintro. Shoal Creek watershed.	WR, CB	E	<u>LE, XN</u>	S1	G1
<u>Fundulus chrysotus</u>	(Günther, 1866)			Golden Topminnow	
Swamps, backwaters, and pools of ditches and slow-moving creeks; Reelfoot Lake & imm. vicinity.	CP, MF	D		S1S2	G5
<u>Fundulus julisia</u>	Williams and Etnier, 1982			Barrens Topminnow	
Springs, spring runs, and first- and second-order headwaters and creeks in the Barrens of Cannon, Coffee, & Warren counties.	ER, CB, SV	E		S1	G1
<u>Hemitremia flammea</u>	(Jordan and Gilbert, 1878)			Flame Chub	
Springs and spring-fed streams with lush aquatic vegetation; Tennessee & middle Cumberland river watersheds.	WR, ER, CB, RV, WU, SV, BR, CU	D		S3	G3
<u>Hybognathus placitus</u>	Girard, 1856			Plains Minnow	
Clear to highly turbid rivers and creeks with sandy bottoms; Mississippi River & imm. environs.	CP, MF	D		S1	G4
<u>Hybopsis lineapunctata</u>	Clemmer and Suttkus, 1971			Lined Chub	
Small upland creeks with sandy substrates; Conasauga River watershed.	RV	D		S1	G3G4
<u>Ichthyomyzon gagei</u>	Hubbs and Trautman, 1937			Southern Brook Lamprey	
Gravel and sand riffles and runs of small rivers and creeks; Conasauga & lower Tennessee river watersheds.	WR, RV, CB, WU, BR	D		S1	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<u>Ichthyomyzon unicuspis</u>	Hubbs and Trautman, 1937				Silver Lamprey
Lakes, reservoirs, & large rivers; Lower Cumberland, Lower Tennessee, and probably Mississippi River watersheds.	WR, CB	D		S2	G5
<u>Lampetra sp. 1</u>			A brook lamprey - Obion River system		
Small - medium sized streams with stable silt/sand substrates; endemic to the Obion River watershed; reported from Henry County.				S2	GNR
<u>Macrhybopsis gelida</u>	(Girard, 1856)				Sturgeon Chub
Large turbid rivers & their larger tributaries; Mississippi River proper.	MF	D		S1	G3
<u>Macrhybopsis meeki</u>	(Jordan and Evermann, 1896)				Sicklefin Chub
Main channel of the Mississippi River in swift currents over sand and gravel substrates.	MF	D		S2	G3
<u>Macrhybopsis sp. 1</u>					Coosa Chub
In swift currents over gravel substrates; Conasauga River.	RV			S1	G3G4
<u>Moxostoma lacerum</u>	Jordan and Brayton, 1877				Harelip Sucker
Medium to large, warm, sluggish streams with relatively low turbidity and silt levels; presumed extinct.	ER, CB	D		SX	GX
<u>Notropis albizonatus</u>	Warren and Burr, 1994				Palezone Shiner
Large upland creeks and small rivers in quiet waters and flowing pools; possibly extirpated from TN.	RV	E	LE	SH	G1
<u>Notropis asperifrons</u>	Suttkus and Raney, 1955				Burrhead Shiner
Rocky and sandy pools and runs of clear creeks and small rivers; Conasauga River watershed.	RV, BR			S2	G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<i>Notropis buccatus</i>	(Cope, 1865)				Silverjaw Minnow
Small creeks & large rivers with moderate current & sandy substrates; upper Cumberland River watershed; poss. introd. Stones River.	CB, CM	T		S1	G5
<i>Notropis chrosomus</i>	(Jordan, 1877)				Rainbow Shiner
Small, clear, often spring-fed streams with sand and gravel substrates; Conasauga River watershed.	RV, BR			S3	G4
<i>Notropis dorsalis</i>	(Agassiz, 1854)				Bigmouth Shiner
Cool, low-gradient creeks over sand or fine gravel substrates; tributaries near confluence of Mississippi River.	MF	D		S1	G5
<i>Notropis rubellus</i>	(Agassiz, 1850)				Rosyface Shiner
Clear, swift, large creeks with bottoms of clean gravel or rubble; tributaries to Cumberland River upstream of Falls.	CM	D		S2	G5
<i>Notropis rupestris</i>	Page, 1987				Bedrock Shiner
Bedrock pools of some low-gradient streams of the Nashville Basin.	ER, WR, CB	D		S2	G2
<i>Notropis stilbius</i>	Jordan, 1877				Silverstripe Shiner
Still or gently flowing pool areas in the Conasauga River & larger tributaries.	BR			S3	G4
<i>Noturus baileyi</i>	Taylor, 1969				Smoky Madtom
Clear, cool, rocky riffles, runs, and flowing pools of mountain creeks; lower Little Tennessee River system.	BR	E	LE, XN	S1	G1
<i>Noturus crypticus</i>	Burr, Eischenhour, and Grady, 2005				Chucky Madtom
Stream runs with slow to moderate current over pebble gravel, cobble, or slab rock; Little Chucky Creek; Nolichucky River system.	RV	E	LE	S1	G1

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
Noturus fasciatus	Burr, Eissenhour, and Grady, 2005				Saddled Madtom
Rocky riffles, runs, and flowing pools of clear creeks & small rivers; Duck River system and nearby tributaries of the Tennessee River.	WR, CB, WU	T		S2	G2
Noturus flavipinnis	Taylor, 1969				Yellowfin Madtom
Medium size to large creeks and small rivers that are unpolluted & relatively unsilted; upper Tennessee River watershed.	RV, BR	E	LT, XN	S1	G1
Noturus gladiator	Thomas and Burr, 2004				Piebald Madtom
Large creeks & rivers in moderate-swift currents with clean sand or gravel substrates; Mississippi River tributaries.	CP, WU, MF	D		S3	G3
Noturus munitus	Suttkus and Taylor, 1965				Frecklebelly Madtom
In moderate-swift currents of main channel of Conasauga River over a variety of substrates.	RV	T		S1	G3
Noturus stanauli	Etnier and Jenkins, 1980				Pygmy Madtom
Medium to large rivers with moderate to strong current over gravel substrates; Tennessee River watershed.	WR, RV, CB	E	LE, XN	S1	G1
Percina antesella	Williams and Etnier, 1977				Amber Darter
Main channel of Conasauga River in flowing pools & deeper runs with clean substrates of sand, gravel, scattered boulders.	RV, BR	E	LE	S1	G1G2
Percina aurantiaca	(Cope, 1868)				Tangerine Darter
Large-moderate size headwater trib. to Tennessee River, in clear, fairly deep, rocky pools, usually below riffles.	RV, CM, BR, CU	D		S3	G4
Percina burtoni	Fowler, 1945				Blotchside Logperch
Large creeks and small-medium rivers with low turbidity and gravel-cobble substrates; Tennessee & Cumberland River watersheds.	WR, ER, RV, CB, BR	D		S2	G2G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal AGNATHA & OSTEICHTHYES (FISH) <u>Percina jenkinsi</u>	Thompson, 1985 Deep gravel runs or pools with small stones & sandy bottoms; Conasauga and Jacks rivers; Conasauga River watershed.	RV, BR	E	LE	S1 G1
<u>Percina kathae</u>	Thompson, 1997 Pool areas, deep riffles, & runs; Conasauga River & its larger tributaries.	BR		S2S3	G4
<u>Percina kusha</u>	Williams and Burkhead, 2007 Small rivers with exceptional water quality, in flowing pools with sand, detritus, boulders; Conasauga River watershed.	BR		S1	G2
<u>Percina macrocephala</u>	(Cope, 1867) Clear, larger upland creeks and small-med rivers, usually in rocky flowing pools upstream/rubble riffles; Tenn & Cumb river watersheds.	WR, ER, CB	T	S2	G3
<u>Percina phoxocephala</u>	(Nelson, 1876) Small-large rivers with moderate gradient in shoal areas with moderate-swift currents; portions of Tenn & Cumb river watersheds.	WR, ER, CB	D	S3	G5
<u>Percina squamata</u>	(Gilbert and Swain, 1887) Small-med rivers; in strong flowing chutes with rubble/boulders in high-gradient streams; portions of upper Tenn & Cumb river systems.	CU, BR	D	S2	G3
<u>Percina stictogaster</u>	Burr and Page, 1993 Small rivers & larger creeks; pool areas with moderately sluggish current & aquatic vegetation; Barren River watershed.	WR	D	S1	G4G5
<u>Percina tanasi</u>	Ettinger, 1976 Sand and gravel shoals of moderately flowing, vegetated, large creeks; upper Tennessee River watershed.	RV, CB, SV, BR	T	LT	S2S3 G2G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AGNATHA & OSTEICHTHYES (FISH)					
<u>Percina williamsi</u>	Page and Near, 2007				Sickle Darter
Flowing pools over rocky, sandy, or silty substrates in clear creeks or small rivers; upper Tennessee River system; east TN.	RV, CU, BR	T		S2	G2
<u>Phenacobius catostomus</u>	Jordan, 1877				Riffle Minnow
Gravel and rubble-bottomed runs and riffles of creeks and small to medium rivers; Conasauga River watershed.	BR			S2	G4
<u>Scaphirhynchus albus</u>	(Forbes and Richardson, 1905)				Pallid Sturgeon
Large, turbid, free-flowing riverine habitat, in strong current over firm gravel or sandy substrates; Mississippi River main channel.	MF	E	LE	S1	G2
<u>Thoburnia atripinnis</u>	(Baily, 1959)				Blackfin Sucker
Larger creeks with quiet or gently flowing pools with scattered substrate & undercut banks; Barren River watershed.	WR, CB	D		S2	G3
<u>Typhlichthys subterraneus</u>	Girard, 1859				Southern Cavefish
Aquatic cave obligate; cave streams, karst waters, and water supply wells; reported from all karst regions excluding RV & BR.	WR, ER, CB, WU, SV, CU	D		S3	G4
AMPHIBIA (AMPHIBIANS)					
<u>Acris gryllus</u>	(Le Conte, 1825)				Southern Cricket Frog
Grassy margins of swamps, marshes, lakes, ponds, streams, ditches, and nearby temporary pools; far SW Tennessee.	CP, WU			S2S3	G5
<u>Ambystoma barbouri</u>	Kraus and Petraska, 1989				Streamside Salamander
Seasonally ephemeral karst streams; middle Tennessee.	WR, CB	D		S2	G4
<u>Aneides aeneus</u>	(Cope and Packard, 1881)				Green Salamander
Damp crevices in shaded rock outcrops and ledges; beneath loose bark and cracks of trees and sometimes in/or under logs.	ER, RV, CB, CM, CU			S3S4	G3G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AMPHIBIA (AMPHIBIANS)					
<u>Cryptobranchus alleganiensis</u>	(Daudin, 1803)				Hellbender
Rocky, clear creeks and rivers with large shelter rocks.	WR, ER, CB, RV, WU, SV, BR, CU	D		S3	G3G4
<u>Desmognathus abditus</u>	Anderson and Tilley, 2003			Cumberland Dusky Salamander	
Assoc. with streams of Cumberland Plateau; under rocks along small streams or adj. cover; Morgan & Grundy counties.	ER, CB, RV, CU, BR			S2S3	G2G3
<u>Desmognathus aeneus</u>	Brown and Bishop, 1947			Seepage Salamander	
Leaf litter in mixed hardwood forests near small creeks, springs and seeps; southern Blue Ridge; SE Tennessee.	RV, BR	D		S1	G3G4
<u>Desmognathus carolinensis</u>	Dunn, 1916			Carolina Mountain Dusky Salamander	
Seepage areas, springs, small streams, & wet rock faces; spruce-fir forest floor; Blue Ridge; Cocke, Greene, Unicoi Cos.	BR			S2S3	G4
<u>Desmognathus santeetlah</u>	Tilley, 1981			Yellow Dusky Salamander	
Stream headwaters and high elevation seepage areas in a four-county area of the Appalachians in far east Tennessee.				S2S3	G3G4Q
<u>Desmognathus welteri</u>	Barbour, 1950			Black Mountain Salamander	
Spring runs and permanent streams in wooded mountainous terrain; northern Cumberlands.	WR, RV, CM, CU	D		S3	G4
<u>Desmognathus wrighti</u>	King, 1936			Pygmy Salamander	
Mature hardwoods & spruce-fir forests under moss, leaf litter, logs, bark, and rocks; high elevations; Blue Ridge.	RV, BR	D		S2S3	G3
<u>Eurycea junaluska</u>	Sever, Dundee, and Sullivan, 1976			Junaluska Salamander	
Beneath rocks along medium to large streams; S Blue Ridge; Monroe, Blount, & Sevier counties.	RV, BR	D		S2	G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AMPHIBIA (AMPHIBIANS)					
<u>Gyrinophilus gulolineatus</u>	Brandon, 1965			Berry Cave Salamander	
Aquatic cave obligate; Ridge & Valley; formerly included with <i>G. palleucus</i> .		RV	T	C	S1 G1Q
<u>Gyrinophilus palleucus</u>	McCrady, 1954			Tennessee Cave Salamander	
Aquatic cave obligate; cave streams & rimstone pools; Central Basin, Eastern Highland Rim, & Cumberland Plateau.	ER, CB, RV, SV, CU, BR		T	S2	G2G3
<u>Hemidactylum scutatum</u>	(Temminck and Schlegel, 1838)			Four-toed Salamander	
Woodland swamps, shallow depressions, & sphagnum mats on acidic soils; middle & east Tennessee.	WR, ER, CB, RV, CP, CM, WU, BR, SV, CU, MF	D		S3	G5
<u>Hyla gratiosa</u>	LeConte, 1856			Barking Treefrog	
Low wet woods and swamps esp. with ephemeral ponds.	WR, ER, CP, WU, SV, CU, MF	D		S3	G5
<u>Plethodon aureolus</u>	Highton, 1983			Tellico Salamander	
Mountainous & lowland forests of the Blue Ridge; Monroe & Polk counties.	BR			S2	G2G3
<u>Plethodon kentucki</u>	Mittleman, 1951			Cumberland Plateau Salamander	
Under logs or leaf litter in mature hardwood forests on steep slopes underlain by sandstone or shale; Cumberland Mountains; Scott Co.				S1S2	G4
<u>Plethodon shermani</u>	Stejneger, 1906			Red-legged Salamander	
Mesic forests, often under leaf litter, logs, or mossy rocks; S Blue Ridge; SE Tennessee.				S2	G3
<u>Plethodon wehrlei</u>	Fowler and Dunn, 1917			Wehrle's Salamander	
Sheltered areas in mesic hardwood forests; Cumberland Mountains; Campbell County.	CM	D		S1	G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
AMPHIBIA (AMPHIBIANS)					
Plethodon welleri	Walker, 1931				Weller's Salamander
Rich woods under downed logs, rocks, leaf litter; spruce-fir, birch-hemlock, and primarily deciduous forests of NE Blue Ridge.	BR	D		S2	G3
Plethodon yonahlossee	Dunn, 1917				Yonahlossee Salamander
Mature woodlands, hillsides, and ravines of the Blue Ridge Mountains; far NE Tennessee; esp. Cherokee National Forest.	BR			S2	G4
Rana capito	LeConte, 1855				Carolina Gopher Frog
Seasonally flooded ponds in the Barrens of Coffee County.	ER			S1	G3
AVES (BIRDS)					
Accipiter striatus	Vieillot, 1808				Sharp-shinned Hawk
Forests and open woodlands.	WR, ER, RV, CP, CM, BR, CU	D		S3B,S4N	G5
Aegolius acadicus	(Gmelin, 1788)				Northern Saw-whet Owl
High elevation spruce-fir forests; Blue Ridge Mountains.	RV, BR	T		S1	G5
Aimophila aestivalis	(Lichtenstein, 1823)				Bachman's Sparrow
Dry open pine or oak woods; nests on the ground in dense cover.	WR, ER, CB, RV, CP, WU, CU, MF	E		S1B	G3
Ammodramus henslowii	(Audubon, 1829)				Henslow's Sparrow
Damp open fields and meadows with grass interspersed with weeds or shrubs.	WR, ER	D		S1B	G4
Anhinga anhinga	(Linnaeus, 1766)				Anhinga
Swamps, lakes, and sluggish streams at low elevations.	WR, WU, MF	D		S1B	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal AVES (BIRDS)					
<u>Aquila chrysaetos</u> Open country, open wooded country, and barren areas, especially in hilly or mountainous regions.	(Linnaeus, 1758) WR, ER, CB, CU, BR	T		S1	G5
<u>Ardea alba</u> Marshes, swampy woods, streams, lakes, and ponds; also fields and meadows; colonial nester.	Linnaeus, 1758 WR, RV, CB, CP, BR, MF	D		S2B,S3N	G5
<u>Botaurus lentiginosus</u> Lake and pond edges with plentiful vegetation, and wetlands created by impoundments; rare nester.	(Rackett, 1813) ER, WR			S1	G4
<u>Chondestes grammacus</u> Open habitats with scattered bushes and trees, prairie, cultivated areas, fields with bushy borders; ground nester.	(Say, 1823) WR, CB, CP, WU, MF	T		S1B	G5
<u>Circus cyaneus</u> Marshes, meadows, grasslands, and cultivated fields; ground nester.	(Linnaeus, 1766) D			S4N	G5
<u>Contopus cooperi</u> Forest, woodland, and open habitats with scattered trees, esp. with tall dead snags.	(Nuttall, 1831) BR	D		S1	G4
<u>Corvus corax</u> Hilly or mountainous areas, esp near cliffs; nests usually on cliff ledges or in coniferous trees.	Linnaeus, 1758 RV, SV, CU, BR	T		S2	G5
<u>Dendroica cerulea</u> Mature deciduous forest, particularly in floodplains or mesic conditions.	(Wilson, 1810) WR, ER, CB, RV, CP, CM, WU, BR,	D		S3B	G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal AVES (BIRDS) <u>Egretta caerulea</u>	(Linnaeus, 1758) Bodies of calm shallow water; colonial nester.	WR, CP, WU, MF	D	S2B,S3N	G5
<u>Egretta thula</u>	(Molina, 1782) Marshes, lakes, ponds; colonial nester.		D	S2B,S3N	G5
<u>Empidonax alnorum</u>	Brewster, 1895 Alder thickets adj. balds, forest edge, boggy meadows; higher elevations of Southern Blue Ridge.	BR		S1	G5
<u>Falco peregrinus</u>	Tunstall, 1771 Varied habitats including farmlands, marshes, river mouths, and cities; often nests on ledges.	RV, CB, CM, BR, CU, MF	E	S1B	G4
<u>Gallinula galeata</u>	(Lichtenstein, 1818) Marshes, quiet rivers, lakes and ponds; nests among marsh plants over water; infrequently flies.	RV, MF	D	S1B	G5
<u>Haliaeetus leucocephalus</u>	(Linnaeus, 1766) Areas close to large bodies of water; roosts in sheltered sites in winter; communal roost sites common.	WR, ER, RV, CB, CP, WU, SV, CU,	D	S3	G5
<u>Ictinia mississippiensis</u>	(Wilson, 1811) Undisturbed stands of lowland and floodplain forests and along major rivers.	CP, MF	D	S2S3	G5
<u>Ixobrychus exilis</u>	(Gmelin, 1789) Marshes with scattered bushes or other woody growth; readily uses artificial wetland habitats.	ER, RV, CB, CP, CU, MF	D	S2B	G5

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal AVES (BIRDS)					
<u>Lanius ludovicianus</u>	Li nnaeus, 1766			Loggerhead Shrike	
Open country with scattered trees and shrubs and occasional open woodl and; extremely rare breeder.	CB, RV, CP, MF	D		S1B,S2N	G4
<u>Limnothlypis swainsonii</u>	(Audubon, 1834)			Swainson's Warbler	
Mature, rich, damp, deciduous floodplain and swamp forests.	WR, RV, CP, WU, CM, CU, BR, MF	D		S3	G4
<u>Passerculus sandwichensis</u>	(Gmelin, 1789)			Savannah Sparrow	
Grassland habitats, away from cultivated fields and fence lines; reported from Ridge & Valley and Western Highland Rim.	WR, RV			S1B,S4N	G5
<u>Poecile atricapillus</u>	(Li nnaeus, 1766)			Black-capped Chickadee	
Deciduous and mixed forest and woodland, and tall thickets; Appalachian Mountains.		D		S2B	G5
<u>Pooecetes gramineus</u>	(Gmelin, 1789)			Vesper Sparrow	
Bal ds, old pastures; ground nester.	WR, BR	D		S1B,S4N	G5
<u>Rallus elegans</u>	Audubon, 1834			King Rail	
Marshes, upland-wetland marsh edges, flooded farmlands, shrub swamps.	ER, RV	D		S2	G4
<u>Sphyrapicus varius</u>	(Li nnaeus, 1766)			Yellow-bellied Sapsucker	
Deciduous or mixed deciduous-coniferous forest; winters statewide and breeds in Appalachian Mountains.	BR	D		S1B,S4N	G5
<u>Sternula antillarum athalassos</u>	(Burliegh and Lowery, 1942)			Interior Least Tern	
Mississippi River sand bars & islands, dikes.	CP, MF	E	LE	S2S3B	G4T2Q

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal AVES (BIRDS)					
<u>Thryomanes bewickii</u>	(Audubon, 1827)			Bewick's Wren	
Brushy areas, thickets and scrub in open country, open and riparian woodland.	WR, ER, CB, CP, WU, CM, CU, BR,	E		S1	G5
<u>Tyrannus forficatus</u>	(Gmelin, 1789)		Scissor-tailed Flycatcher		
Open country, dry grasslands, cultivated lands, scrub; widespread but uncommon breeders in TN.			S2B	G5	
<u>Tyto alba</u>	(Scopoli, 1769)			Barn Owl	
Open and partly open country, often around human habitation; farms.	ER, WR, CB, RV, CP, BR, MF	D		S3	G5
<u>Vermivora chrysoptera</u>	(Linnaeus, 1766)		Golden-winged Warbler		
Early successional habitats in foothill regions of Appalachians.	CM, BR, CU	D		S3B	G4
<u>Vireo bellii</u>	Aububon, 1844			Bell's Vireo	
Thickets adjacent to water, bottomlands; west Tennessee and one confirmed location in Western Highland Rim.	CP			S1B	G5
MAMMALIA (MAMMALS)					
<u>Condylura cristata</u>	(Linnaeus, 1758)		Star-nosed Mole		
Hydric soils in beech-maple-birch forests at higher elevations in the Appalachians.	BR	D		S2	G5
<u>Corynorhinus rafinesquii</u>	(Lesson, 1827)		Rafinesque's Big-eared Bat		
Caves, hollow trees, abandoned buildings; often associated with forested areas.	ER, RV, CB, CP, SV, CM, WU, BR, CU,	D		S3	G3G4
<u>Corynorhinus townsendii virginianus</u>	Handley, 1955		Virginia Big-eared Bat		
Caves typically in limestone karst regions dominated by mature hardwood forests. Prefers cool, well-ventilated caves for hibernation. Maternity colonies settle deep within caves.	BR	LE		S1	G3G4T2

HABITAT		PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal						
MAMMALIA (MAMMALS)						
<u>Glaucomys sabrinus coloratus</u>	Handley, 1953			Carolina Northern Flying Squirrel		
Spruce-fir or mature hardwood forest with snags; in tree cavities or leaf nests; higher elevations of the Appalachians.		BR	E	<u>LE</u>	S1S2	G5T2
<u>Martes pennanti</u>	(Erxleben, 1777)					Fisher
Large, heavily wooded areas w/ mixed hardwoods or conifers; presumably extirpated; reintrod. into the northern Cumberland Plateau.					SU	G5
<u>Microtus chrotorrhinus carolinensis</u>	Komarek, 1932					Southern Rock Vole
Mossy rocks and logs, and cool, moist talus slopes at higher elevations of the Appalachians.		BR	D		S2	G4T3
<u>Mustela nivalis</u>	Linnaeus, 1766					Least Weasel
Old fields, hedgerows, and forested areas; Appalachian Mountains, Ridge & Valley, & Cumberland Plateau.		RV, BR, CU			S2	G5
<u>Myotis austroriparius</u>	(Rhoads, 1897)					Southeastern Myotis
Caves, but especially hollow trees & abandoned buildings, usually near water.		CP, MF			S3	G3G4
<u>Myotis griseescens</u>	A. H. Howell, 1909					Gray Myotis
Cave obligate year-round; frequents forested areas; migratory.		WR, ER, CB, RV, CP, CM, WU, SV,	E	<u>LE</u>	S2	G3
<u>Myotis leibii</u>	(Audubon and Bachman, 1842)					Eastern Small-footed Myotis
Hibernates in caves & mines; also uses abandoned buildings, bridges, and barns seasonally.		WR, ER, RV, CM, BR, CU	D		S2S3	G1G3
<u>Myotis septentrionalis</u>	(Trovessart, 1897)					Northern Myotis
A forest bat whose summer roosts may include caves, mines, live trees and snags; hibernates in caves and mines, often using small cracks and fissures. -A Notably susceptible to White-Nose		WR, CB, BR, CU		<u>LT</u>	S1S2	G2G3

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
MAMMALIA (MAMMALS)					
<u>Myotis sodalis</u>	Miller and Allen, 1928				Indiana Myotis
Hi bernates in caves; spring/summer maternity roosts are normally under the bark of standing trees.	ER, WR, CB, RV, CM, BR, CU, MF	E	LE	S1	G2
<u>Napaeozapus insignis</u>	(Miller, 1891)				Woodland Jumping Mouse
Deciduous and coniferous forests with herbaceous groundcover; middle and east Tennessee.	ER, RV, CM, BR, CU	D		S4	G5
<u>Neotoma floridana haematoreia</u>	A. H. Howell, 1934				Southern Appalachian Woodrat
Forests & talus slopes in southern Appalachians of southeastern Tennessee.	BR	D		S2	G5T4Q
<u>Neotoma floridana illinoensis</u>	A. H. Howell, 1910				Eastern Woodrat
Forested areas, caves & outcrops; west Tennessee generally.	CP, MF	D		S3	G5T5
<u>Neotoma magister</u>	Baird, 1858				Allegheny Woodrat
Outcrops, cliffs, talus slopes, crevices, sinkholes, caves & karst.	WR, ER, CB, RV, CM, SV, BR, CU	D		S3	G3G4
<u>Parascalops breweri</u>	(Bachman, 1842)				Hairy-tailed Mole
Moist soils in deciduous forests with thick humus; east Tennessee.	RV, CM, BR	D		S3	G5
<u>Sorex cinereus</u>	Kerr, 1792				Cinereus Shrew
Rich woodlands of many types; open fields; middle and east Tennessee.	WR, ER, RV, CP, CM, BR, CU	D		S4	G5
<u>Sorex dispar</u>	Batchelder, 1911				Long-tailed Shrew
Mountainous, forested areas with loose talus; east Tennessee.	RV, BR, CU	D		S2	G4

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
MAMMALIA (MAMMALS)					
<i>Sorex fumeus</i>	Milner, 1895				Smoky Shrew
Damp wooded areas including coniferous or mixed forests; middle and east Tennessee.	ER, CB, RV, CM, BR, CU	D		S4	G5
<i>Sorex hoyi</i>	Baird, 1858				American Pygmy Shrew
Found in a variety of habitats, with moist sites preferred over dry areas; middle and east Tennessee.	ER, WR, RV, CU, BR			S2	G5
<i>Sorex longirostris</i>	Bachman, 1837				Southeastern Shrew
Various habitats including wet meadows, damp woods, and uplands; statewide.	WR, ER, CB, RV, CP, CM, WU, BR,	D		S4	G5
<i>Sorex palustris</i>	Richardson, 1828				American Water Shrew
Most abundant along small cold streams with thick overhanging riparian growth; Appalachian Mountains.	BR	D		S2	G5
<i>Spilogale putorius</i>	(Linnaeus, 1758)				Eastern Spotted Skunk
Rocky outcrops, open prairies, brushy areas, cultivated fields, and barnyards; more common in east Tennessee; reclusive.	ER, CM, CU, BR			S3	G4
<i>Synaptomys cooperi</i>	Baird, 1858				Southern Bog Lemming
Marshy meadows, wet bogs, & rich upland forests.	WR, RV, CP, CM, BR, CU	D		S4	G5
<i>Zapus hudsonius</i>	(Zimmermann, 1780)				Meadow Jumping Mouse
Open grassy fields; often abundant in thick vegetation near water bodies; statewide.	WR, ER, CB, RV, CP, WU, BR, CU,	D		S4	G5
REPTILIA (REPTILES)					
<i>Clonophis kirtlandii</i>	(Kennicott, 1856)				Kirtland's Snake
Typically inhabits wet meadows, wet prairies and associated open and wooded wetlands, seasonal marshes, open swamps, and sparsely wooded hillsides.				S1	G2

HABITAT	PHYSIOGRAPHIC PROVINCES	STATE STATUS	FEDERAL STATUS	SRANK	GRANK
Vertebrate Animal					
REPTILIA (REPTILES)					
<i>Glyptemys muhlenbergii</i>	(Schoepff, 1801)				Bog Turtle
Muck-bottomed bogs, fens, marshy/sedge-tussock meadows, spring seeps, wet pastures, and shrub swamps; Appalachians.	BR	T	SAT	S1	G3
<i>Macrochelys temminckii</i>	(Troost, in Harlan, 1835)				Alligator Snapping Turtle
Slow moving, deep water of rivers, sloughs, oxbows, swamps, and lakes; middle and west Tennessee; obscure.	WR, CB, CP, WU, MF	D		S2S3	G3G4
<i>Nerodia cyclopion</i>	(Dumeril, Bi bron, and Dumeril, 1854)				Mississippi Green Watersnake
Marshes, swamps, bayous, shallow lakes and ponds, wet prairies, oxbows and floodplain sloughs; far west Tennessee.	CP, MF	D		S2	G5
<i>Nerodia erythrogaster neglecta</i>	(Conant, 1949)				Copperbelly Watersnake
Warm, quiet waters; wooded lakes, streams, sloughs; northern middle Tennessee; Lower Cumberland & Tennessee river watersheds.	WR, WU			S2S3	G5T3
<i>Ophisaurus attenuatus longicaudus</i>	McConkey, 1852				Eastern Slender Glass Lizard
Dry upland areas including brushy, cut-over woodlands and grassy fields; nearly statewide but obscure; fossorial.	ER, WR, RV, CB, CP, WU, CU, BR	D		S3	G5T5
<i>Pituophis melanoleucus melanoleucus</i>	(Daudin, 1803)				Northern Pinesnake
Well-drained sandy soils in pine/pine-oak woods; dry mountain ridges; E portions of west TN, E to lower elev of the Appalachians.	WR, ER, CB, RV, CP, WU, BR, CU	T		S3	G4T4
<i>Plestiodon anthracinus</i>	Baird, 1849 [or 1850]				Coal Skink
Humid wooded areas with abundant leaf litter and loose rocks; vicinity of springs, swamps, and bogs; spotty distribution.	WR, WU, BR	D		S1	G5
<i>Sistrurus miliarius streckeri</i>	Gloyd, 1935				Western Pygmy Rattlesnake
Usually near water in river floodplains, swamps, marshes, and wet prairies; occasional wooded uplands; W half of Tenn., generally.	WR, CB, CP, WU	T		S2S3	G5T5