### Introduction

The Northern and Southern Cumberlands Project Areas encompass a broad region from Overton and Pickett counties along the Kentucky/Tennessee line to Franklin and Marion counties along the Tennessee/Alabama line. The Nature Conservancy of Tennessee identified this large area as a conservation priority due to the remarkable biodiversity of its forests and aquatic systems. Caves and karst features represent a significant component of the Cumberlands landscape, though the species diversity of these systems was not well-known.

Much of what was known about the cave fauna of the Cumberlands project areas was a result of the work of Dr. Thomas C. Barr, Jr. The subterranean fauna of the Tennessee part of the area was summarized in Barr (1961). As part of the ecoregional plan for the Interior Low Plateaus, Lewis (1999) summarized the subterranean fauna of the ecoregion. A biological reconnaissance of caves of White and Van Buren counties (Lewis 2001, 2002) suggested that many faunal elements remained undiscovered. An inventory of the cave fauna of the Northern Cumberlands Project Area was subsequently performed (Lewis 2004) upon which the present work builds.

Conservation planning for this project area revealed a need for more cave species data, which is important for prioritizing sites and areas for protection and additional research projects. The goal of this biological survey was to enhance our understanding of the cave species existing in the Cumberlands Project Areas.

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### **Methods & Materials**

Sampling included (figure 1): (1) hand collecting; (2) pitfall traps (four ounce glass specimen jars filled with 70% isopropyl alcohol as a preservative and baited with limburger cheese) (3) Karaman-Chappuis extraction of stream gravel, (4) plankton netting of drip pools, and (5) Berlese extraction of leaf litter. Selected hand sampling of taxa for DNA analysis was done with 100% ethanol.

Water samples from pool netting and Karaman-Chappuis extraction were placed in a cooler and transported back to the motel each night where they were placed in petri dishes and examined for living fauna under a dissecting microscope. Litter taken from the cave was kept in a cooler, then transported back to the laboratory where it was placed in a Berlese funnel. Overhead light/heat extracted the invertebrates into a vial of 70% isopropyl alcohol. Pitfall residues were screened then transferred into petri dishes for sorting of the fauna under a dissecting microscope. Specimens of each taxon were placed in 3 or 4 dram vials of 70% ethyl alcohol and labeled per cave of origin, state, county, miles to nearest town, date and collector.

Sites visited during the 2004-2005 field season are indicated in the inventory list with an \*.



**Figure 1.** Samping methods – extracting crustaceans from a pool by dipping and running the water through a plankton net (foreground) and placing a pitfall trap (background).

# **Faunal List**

In the following list each species is placed within a hierarchical classification. For each species there is a scientific name, original author of the species, a descriptive common name and an ecological classification. Examples are shown in figures 2-7. The ecological classifications adhere to the following system:

Classification	Abbreviation	<u>Definition</u>
Troglobite	TB	terrestrial, morphologically adapted and restricted to caves, must feed and reproduce in the cave environment
Troglophile	TP	terrestrial, +/- morphologically adapted to caves, not restricted to caves, but can feed and reproduce in the cave
		environment
Trogloxene	TX	terrestrial, not usually morphologically adapted to caves, usually leaves the cave to either feed or reproduce
Stygobite	SB	aquatic, morphologically adapted and restricted to caves, must feed and reproduce in the cave environment
Stygophile	SP	aquatic, +/- morphologically adapted to caves, not restricted to caves, but can feed and reproduce in the cave
		environment
Stygoxene	SX	aquatic, not usually morphologically adapted to caves, usually leaves the cave to either feed or reproduce
<b></b>		
Edaphobite	ED	terrestrial, deep soil inhabitant also occurring in caves
Phreatobite	PB	aquatic, groundwater organism occurring in saturated interstices of non-cave habitats or caves
Accidental	AC	falls or washes into caves, dies if can not exit

Accompanying each taxon identified to the species level is a G-rank, or Global rank of rarity, according to the following simplified system:

Global Rank	Number of sites	<u>Characterization</u>
G1	1-5	critically imperiled
G2	6-20	imperiled
G3	21-100	vulnerable
G4	100+	apparently secure
G5		secure
EX		introduced, non-native



**Figure 2.** The Pluto cave pseudoscorpion <u>Kleptochthonius</u> <u>pluto</u>, a highly cave-adapted troglobite, is known only from a few caves in Overton County, Tennessee.



**Figure 3.** The Southern cave crayfish <u>Orconectes</u> <u>australis</u> is a stygobite inhabiting caves of the Cumberland Plateau area.



**Figure 4.** The southeastern cave pseudoscorpion <u>Hesperochernes</u> <u>mirabilis</u> is frequently found associated with woodrat nests in caves.



**Figure 5.** The Cave salamander <u>Eurycea lucifuga</u> is a troglophile that may spend its entire life cycle in Tennessee caves, but occurs in other surface habitats.



**Figure 6.** The cave cricket <u>Hadenoecus</u> <u>opilionoides</u> is a trogloxene and must leave the cave to feed on the surface.



**Figure 7.** The Eastern phoebe <u>Sayornis phoebe</u> is a threshold trogloxene that prefers the entrance zone of caves for nesting sites.

# PHYLUM PLATYHELMINTHES CLASS TURBELLARIA ORDER TRICLADIDA

#### FAMILY KENKIIDAE

Sphalloplana percoeca (Packard) SB cave flatworm

TN: Bledsoe Co.: Aaron Tollett's Cave (Holsinger email 2005); Coffee Co.: Welch Cave; Fentress Co.: Skillmans Mark Cave; Franklin Co.: Dry Cave; Grundy Co.: Woodlee Cave; Marion Co.: Speegle Cove Cave, White Cricket Cave; Overton Co.: Indian Cave, Little Slippery Slit Cave; Pickett Co.: Bunkum Cave; Putnam Co.: Harve Petty Cave (Kenk 1977); Van Buren Co.: Cane Creek Saltpeter Cave, Creeping Cave (Kenk 1977), Pennywinkle Springs, Rumbling Falls Cave; White Co.: Indian Cave (Kenk 1977), Lost Creek Cave

G-rank: G3; <u>Sphalloplana percoeca</u> was recorded from caves in Kentucky, Tennessee, Alabama and West Virginia, although Kenk (1977) noted that the Tennessee localities needed to be verified.

# PHYLUM ANNELIDA CLASS CLITELLATA ORDER OLIGOCHAETA

## **FAMILY LUMBRICIDAE**

Octolasion tyrtaeum (Savigny) ED Woodland white earthworm

**TN:** Fentress Co.: Redbud Cave; Van Buren Co.: Swamp River Cave G-rank: EX; Gates (1959) recorded this European species from two caves in Tennessee. In a study of six sites, this earthworm was present at five of the sites and was the dominant species in two of them (an open oak forest and a mixed deciduous forest)(Reynolds 1972).

# PHYLUM MOLLUSCA CLASS GASTROPODA ORDER PROSOBRANCHIA

### FAMILY HYDROBIIDAE

Pyrgulopsis ogmorphaphe Royal snail

**TN:** Marion Co.: Blue Hole Spring, Sequatchie Cave (Owen Spring) G-rank: G1; This species is known only from these two springs (TDNH 2000).

#### ORDER ARCHAEOGASTROPODA

#### **FAMILY HELICINIDAE**

Helicina undescribed species TX? terrestrial snail

TN: Grundy Co.: Crystal Cave

G1; The ecological classification of this remarkable snail is unknown, as the specimen was taken in a cave, but the snails in this group usually occur in rocky, epigean habitats (Dourson pers. comm.).

Helicina orbiculata (Say) TX terrestrial snail

TN: Grundy Co.: Coppinger Cave

G-rank: G5; This is a calciphile that prefers sunny situations, but is also found in glades and woods (Hubricht 1985).

#### ORDER MESOGASTROPODA

#### FAMILY POMATIOPSIDAE

Pomatiopsis lapidaria (Say) TX terrestrial snail

TN: Franklin Co.: Dry Cave; Overton Co.: Falling Spring Cave

G-rank; G4; This is a calciphilic amphibious or semi-aquatic species that occurs over much of the eastern U.S. (Hubricht 1985).

### **ORDER SIGMURETHRA**

#### **FAMILY CARYCHIDAE**

Carychium exile Lea TP carych

TN: Fentress Co.: Little Jack Creek Cave; Grundy Co.: Tater Cave; Van

Buren Co.: Cummings Cove Cave; Sequatchie Co.: Wilmoth Cave

G-rank: G5; This species occurs across the eastern U.S. in leaves on wooded hillsides and talus slopes (Hubricht 1985).

# Carychium nannodes Clapp TX carych

TN: Fentress Co.: Skillmans Mark Cave; Van Buren Co.: Black Hole with Water, Swamp River Cave

G-rank: G4; This species occurs in habitats similar to <u>Carychium exile</u>, but has a more restricted range. It occurs primarily in the Appalachians and Interior Low Plateaus (Hubricht 1985).

### Carychium stygium Call TB Stygian carych

TN: Coffee Co.: Lusk Cave, Welch Cave; Franklin Co.: Keith Cave, Round Cove Cave; Grundy Co.: Crystal Cave; Overton Co.: Little Slippery Slit Cave; Van Buren Co.: Cave Between Caves; Warren Co.: Hubbards Cave

G-rank: G3; This species was previously known from the central Kentucky karst into northcentral Tennessee, as well as caves associated with the southcentral part of the Cumberland Escarpment in Kentucky (Hubricht 1985). These are the first records of this species from Tennessee in the Cumberland Escarpment area.

### Carychium sp. TX terrestrial snail

**TN: Van Buren Co.**: Black Hole with Water, Cummings Cove Cave These sites are represented by juvenile specimens not identifiable to species.

#### FAMILY PHILOMYCIDAE

Philomycus sp. TX terrestrial snail

**TN:** Pickett Co.: Bunkum Cave; Van Buren Co., Swamp River Cave All members of this genus are woodland snails (Hubricht, 1985).

### FAMILY DISCIDAE

Anguispira alternata (Say) TX terrestrial snail

TN: Overton Co.: Mill Hollow Cave; Van Buren Co.: Cane Creek Saltpeter Cave

G-rank: G5; The species is found in woods and a wide variety of other habitats (Hubricht 1985).

Anguispira mordax (Shuttleworth) TX terrestrial snail

TN: Franklin Co.: Black Hole of Calcutta; Grundy Co.: Payne Saltpeter Cave G-rank: G4; This species is a woodland species that hybridizes with other Anguispira species (Hubricht 1985).

Discus patulus (Deshayes) TX disc snail

TN: Fentress Co.: Little Jack Creek Cave, Redbud Cave; Franklin Co.: Dry Cave; Grundy Co. Tater Cave, Woodlee Cave; Marion Co.: Excited Cow Cave; Warren Co.: Joint Cave, Little Bat Cave

G-rank: G4; this species is common over much of the eastern U.S., where it is frequently associated with upland woods (Hubricht 1985).

Discus nigrimontanus (Pilsbry) TX disc snail

TN: Fentress Co.: Skillmans Mark Cave

G-rank: G3/4; This species is usually associated with rocky upland woods. The distirbution of the species is broken into two disjunct areas, one in the Ozarks and the other primarily in east/central Tennessee, although there are a few records in adjacent parts of North Carolina, Virginia and Kentucky (Hubricht 1985).

Discus sp. TX terrestrial snail

TN: Fentress Co.: Skillmans Mark Cave

### **FAMILY HAPLOTREMIDAE**

Haplotrema concavum (Say) TX terrestrial snail

TN: Overton Co.: Mill Hollow Cave

G-rank: G5; This species feeds on other snails (Hubricht 1985).

### FAMILY HELICODISCIDAE

Helicodiscus hadenoceus Hubricht TB cave disc snail

TN: Marion Co.: Skylight Cave; Overton Co.: Webb Cave

G-rank: G2; Hubricht (1985) reported 7 localities for this species in caves of northern Alabama, east/central Tennessee and southern Kentucky. In Webb Cave the snails were taken from cave cricket guano on the second level of the cave.

### Helicodiscus barri Hubricht TB Barr's terrestrial snail

TN: Cumberland Co.: Baker Cave Annex; Franklin Co.: Keith Cave; Grundy Co.: Skull Cave, Trussell Cave; Overton Co.: Little Slippery Slit Cave, Slippery Slit Cave, Webb Cave; Van Buren Co.: Cave Between Caves, Upper Cummings Cove Cave G-rank: G3; This species is known from caves in Tennessee, northern Alabama and northwestern Georgia (Hubricht 1985).

## Helicodiscus notius specus Hubricht TB cave terrestrial snail

TN: Grundy Co.: Crystal Cave

G-rank: G1/2; This subspecies is known only from cricket guano in caves in eastern Kentucky and adjacent Tennessee (Hubricht 1985).

# Helicodiscus parallelus (Say) TX terrestrial snail

TN: Warren Co.: Joint Cave, Storage Cave

G-rank: G5; This species inhabits urban and a variety of other habitats, but usually does not occur in caves (Hubricht 1985).

# Helicodiscus singleyanus (Pilsbry) terrestrial snail

TN: Coffee Co.: Welch Cave; Cumberland Co.: Baker Cave; Franklin Co.: Dry Cave; Grundy Co.: Big Mouth Cave, Big Room Cave, Crystal Cave, Skull Cave, Tater Cave, Trussell Cave, Wanamaker Cave; Marion Co.: Clear Spring Cave; Sequatchie Co.: Keyhole Cave; Warren Co.: Storage Cave

G-rank: G4; This is a widespread species frequently associated with grasslands (Hubricht 1985).

## Helicodiscus sp. TX/TP terrestrial snail

TN: Overton Co.: Three Forks Cave; Rhea Co.: Marler Cave; Van Buren Co.: Swamp River Cave

Many of the members of this genus are calciphilic and several are cavernicolous (Hubricht, 1985).

## **FAMILY ZONITIDAE**

Glyphalinia lewisiana (Clapp) TX terrestrial snail

TN: Grundy Co.: Big Mouth Cave; Marion Co.: Speegle Cove Cave; Overton Co.: Webb Cave; Van Buren Co.: Cave Between Caves

G-rank: G4; This is a calciphilic, burrowing species usually found on the undersides of stones (Hubricht 1985).

## Glyphalinia carolinensis (Cockerell) TX Terrestrial snail

TN: Cumberland Co.: Baker Cave Annex; Franklin Co.: Round Cove Cave; Grundy Co.: Wanamaker Cave; Van Buren Co.: Laurel Creek Cave

G-rank: G4; This species is usually found in leaf litter. It occurs in a relatively narrow range from southcentral Virginia to eastern Tennessee and western North Carolina (Hubricht, 1985).

# Glyphalinia sculptilis (Bland) TX terrestrial snail

TN: Grundy Co.: Crystal Cave

G-rank: G4; This species, usually found in leaf litter in upland woods, occurs in several southeastern U.S. states (Hubricht 1985).

# Glyphalinia praecox (Baker) TX Terrestrial snail

TN: Coffee Co.: Lusk Cave; Cumberland Co.: Baker Cave Annex; Grundy Co.: Payne Saltpeter Cave; Marion Co.: Clear Spring Cave, Excited Cow Cave; Warren Co.: Little Bat Cave

G-rank: G4; This species is usually found on talus slopes or floodplains (Hubricht 1985).

# Glyphalinia undescribed species TB Terrestrial snail

TN: Fentress Co.: Shane Cave

G-rank: G1; This appears to be a new species of snail – additional material will be needed to ascertain this identification (Dourson & Caldwell, in litt.).

# Glyphyalinia rhoadsi (Pilsbry) TX Rhoad's terrestrial snail

Franklin Co.: Keith Cave

G-rank: G5; This species is typically found in leaf litter in upland woods (Hubricht 1985).

# Glyphyalinia wheatleyi (Bland) TP/TX Wheatley's glyph

TN: Fentress Co.: Flag Trail Cave; Franklin Co.: Keith Cave

G-rank: G4; This species usually occurs in moist leaf litter and is an occasional cavernicole; it occurs throughout the eastern U.S. (Hubricht 1985).

## Glyphyalinia indentata (Say) TX terrestrial snail

TN: Fentress Co.: Skillmans Mark Cave, The Aqueduct; Marion Co.: Skylight Cave; Overton Co.: Little Slippery Slit Cave

G-rank: G4; Hubricht (1985) reported that this name referred to a complex of species with little or no shell differences – the true nature of the species remains confused.

## Glyphalinia sp. TB terrestrial snail

TN: White Co.: Ghost River Cave, Indian Cave

G-rank: G1; This record appears to represent a troglobitic species.

### Glyphyalinia sp. TP/TX terrestrial snail

TN: Bledsoe Co.: Aaron Tollett's Cave; Franklin Co.: Crownover Saltpeter Cave; Grundy Co.: Coppinger Cave, Tater Cave; Pickett Co.: Bunkum Cave; Rhea Co.: Raymer Cave; Van Buren Co.: Swamp River Cave

This and the following taxon are represented by juveniles not identifiable to species level.

# Paravitrea sp. TX terrestrial snail

TN: Overton Co.: Falling Spring Cave; Warren Co.: Hubbards Cave

# Paravitrea capsella (Gould) TX terrestrial snail

TN: White Co.: Lost Creek Cave

G-rank; G4?; This taxon apparently represents a complex of related, undescribed species (Hubricht, 1985).

# Paravitrea multidentata (Binney) TX terrestrial snail

TN: Fentress Co.: Double Entrance Sink Cave

G-rank: G4; This species is primarily distributed in the Appalachians, although there are scattered collections from other parts of the eastern U.S. It usually occurs in deep, moist leaf litter on wooded hillsides and ravines (Hubricht 1985).

# Hawaiia miniscula (Binney) TX terrestrial snail

TN: Franklin Co.: Round Cove Cave; Grundy Co.: Crystal Cave; White Co.: Ghost River Cave

G-rank: G5; This species occurs across the eastern half of the U.S. (Hubricht, 1985).

# Mesomphix cupreus (Rafinesque) TX terrestrial snail

TN: Warren Co.: Little Bat Cave

G-rank: G5; This snail occurs in leaf litter in upland woods (Hubricht 1985).

# Mesomphix sp. TX terrestrial snail

TN: Van Buren Co.: Va-ju-de cave

## Ventridens demissus (Binney) TX terrestrial snail

TN: Cumberland Co.: Baker Cave; Grundy Co.: Big Room Cave

G-rank: G5; This is a species of leaf litter in moist situations (Hubricht 1985).

### Ventridens gularis (Say) TX terrestrial snail

TN: Grundy Co.: Dry Cave; Pickett Co.: Frog Cave; Warren Co.: Storage Cave

G-rank: G4; This species is primarily Appalachian in distribution, where it occurs in leaf litter on wooded hillsides and ravines.

# Zonitoides arboreus (Say) TX terrestrial snail

TN: Cumberland Co.: Baker Annex Cave; Franklin Co.: Caney Hollow Cave, Keith Cave

G-rank: G5; This species is most commonly found on rotting logs, but occurs in many other habitats (Hubricht 1985).

### Gastrodonta interna Wurtz TX terrestrial snail

**TN: Sequatchie Co.**: Wilmoth Cave

G-rank: G5; This species is found in rotting logs and wet leaf litter (Hubricht 1985).

# Striatura meridionalis (Pilsbry & Ferriss) TX terrestrial snail

TN: Franklin Co.: Round Cove Cave

G-rank: G4; This species occurs across the eastern U.S. (Hubricht 1985).

#### FAMILY HELICARIONIDAE

Euconulus sp. TX terrestrial snail

TN: Fentress Co.: Skillmans Mark Cave

### **FAMILY POLYGYRIDAE**

Stenotrema angellum Hubricht TX terrestrial snail

TN: Fentress Co.: Skillmans Mark Cave; Pickett Co.: Bunkum Cave

G-rank: G3/4; This species is usually found under logs and leaf litter on wooded hillsides or ravines; it is found in a relatively narrow range from the southern edge of Indiana, through central Kentucky into the northcentral margin of Tennessee (Hubricht 1985).

# Stenotrema spinosum (Lea) TX terrestrial snail

TN: Franklin Co.: Dry Cave, Round Cove Cave; Grundy Co.: Big Mouth Cave G-rank: G4; This species is a calciphile usually found associated with rotting logs in rock woods (Hubricht 1985).

# Stenotrema stenotrema (Pfeiffer) TX terrestrial snail

TN: Franklin Co.: Dry Cave; Marion Co.: Speegle Cove Cave; Pickett Co.:

Bunkum Cave; Van Buren Co.: Cane Creek Saltpeter Cave

G-rank: G4; This species occurs in a variety of habitats, most commonly wooded hillsides and ravines. It is distributed over the southeastern U.S. (Hubricht 1985).

### Stenotrema sp. TX terrestrial snail

TN: Overton Co.: Falling Spring Cave

# Mesodon appressus (Say) TX terrestrial snail

TN: Fentress Co.: The Aqueduct, Flag Trail Cave, Little Jack Creek Cave,

Shane Cave; Pickett Co.: small cave near Bunkum Cave

G-rank: G4; This species occurs in rocky areas and river bluffs and is primarily Appalachian in distribution (Hubricht 1985).

# Mesodon wetherbyi (Bland) TX Wetherby's terrestrial snail

TN: Fentress Co.: Redbud Cave

G-rank: G2; This snail is endemic to a narrow area along the Cumberland Plateau in southern Kentucky and northern Tennessee, where it is usually found under logs or

moist leaf litter on wooded hillsides or ravines (Hubricht 1985). It is usually an indicator of high forest quality (Dourson pers. comm.).

# Mesodon rugeli (Shuttleworth) TX terrestrial snail

TN: Fentress Co.: Shane Cave, Skillmans Mark Cave; Pickett Co.: Bunkum Cave

G-rank: G4; This species is found in the Appalachians and adjacent areas, where it is usually found under logs and rocks in leaf litter in upland woods (Hubricht 1985).

# Mesodon perigraptus (Pilsbry) TX terrestrial snail

TN: Fentress Co.: Shane Cave; Grundy Co.: Payne Saltpeter Cave; Marion Co.: Cedar Ridge Crystal Cave; Overton Co.: Cooler Cave, Garretts Mill Cave, Indian Cave, Little Slippery Slit Cave, Marie Cave, Mill Hollow Cave; Sequatchie Co.: Stone Cave; Warren Co.: Little Bat Cave

G-rank: G4; This species is found in the southeastern U.S., where it usually occurs on logs or leaf litter in upland woods (Hubricht 1985).

# Mesodon thyroidus (Say) TX terrestrial snail

TN: Overton Co.: Mill Hollow Cave

G-rank: G5; This species is found in a wide variety of habitats, commonly leaf litter in woods and ravines (Hubricht 1985).

## Mesodon sp. terrestrial snail

**TN:** Coffee Co.: Welch Cave; Fentress Co.: The Aqueduct, Fallen Entrance Cave, Flag Trail Cave

These collections are represented by juveniles not identifiable to species.

### Patera laevior (Hubricht) TX terrestrial snail

**TN: Grundy Co.**: Crystal Cave; **Van Buren Co.**: Swamp River Cave G-rank: G4; This species usually occurs in rocky places, as well as on logs and ravines (Hubricht, 1985).

### Patera sp. TX terrestrial snail

TN: Van Buren Co.: Cummings Cove Cave, Plantagenet Hole, Va-ju-de Cave

# Triodopsis complanata (Pilsbry) TX terrestrial snail

TN: Fentress Co.: Redbud Cave; Overton Co.: Mill Hollow cave

G-rank: G2; This species is endemic to a small part of the Cumberland Plateau in southern Kentucky and northcentral Tennessee, where it is usually associated with leaf litter and logs (Hubricht 1985).

### Triodopsis obstricta (Say) TX terrestrial snail

TN: Cumberland Co.: Baker Cave; Sequatchie Co.: Stone Cave; Warren Co.: Joint Cave

G-rank: G4; This species is a calcophile usually found on stream bluffs near logs.

# PHYLUM ARTHROPODA CLASS CRUSTACEA ORDER CYCLOPOIDA

#### FAMILY CYCLOPIDAE

Acanthocyclops parasensitivus Reid SP copepod

TN: Grundy Co.: Big Mouth Cave

G-rank: G2; This is only the sixth collection locality for this species, which occurs over the mid-eastern U.S., but has not been found in many areas that have been thoroughly sampled (Reid email 2005). Besides this cave, it has also been taken from groundwater emerging from a seep in southern Indiana and four epigean collections that seem to have nothing in common.

Diacyclops indianensis Reid PB Indiana groundwater copepod G2

TN: Fentress Co.: Redbud Cave; Franklin Co.: Crownover Saltpeter Cave, Keith Cave, Little Crow Creek Cave,; Grundy Co.: Big Mouth Cave, Dry Cave; Pickett Co.: Bunkum Cave

G-rank: G2; This species was previously known only from Henry Dilk Falls Cave, Jefferson Co., Indiana. This and several other species of <u>Diacyclops</u> from caves and groundwater habitats in Indiana were described by Reid (2004). In Henry Dilk Falls and Bunkum caves the copepods were extracted from the interstices of stream gravels, while in Redbud Cave the specimens were collected by dipping water from a residual flood pool.

Diacyclops yeatmani Reid SB Yeatman's groundwater copepod

TN: Grundy Co.: Big Mouth Cave; Van Buren Co.: Camps Gulf Cave, Swamp River Cave

G-rank: G1; It is known from the Rumbling Falls System by a single specimen taken from a pool in Swamp River Cave. In Camps Gulf Cave 7 copepodid (juvenile) specimens were taken from upper level pools. The Camps Gulf record needs to be confirmed with an adult specimen.

<u>Diacyclops</u> <u>nearticus</u> Kiefer SP Nearctic copepod

TN: White Co.: Lost Creek Cave

G-rank: G3/4; This and the following species were taken from what appeared to be a residual flood pool. <u>Diacyclops nearticus</u> is known from the eastern U.S. from Massachusetts to Florida, but is never common (Bruno, et al., 2000).

Megacyclops donnaldsoni (Chappuis) SB Donnaldson's cave copepod

TN: Grundy Co.: Dry Cave

G-rank: G1; This species was previously known only from caves in Indiana. It is a rare and poorly known species (Reid email 2005).

Megacyclops latipes (Lowndes) SX copepod

TN: Grundy Co.: Big Mouth Cave; Rhea Co., Marler Cave

G-rank: G4; This is a widespread epigean species (Reid email 2005).

Eucyclops elegans (Herrick) SX Elegant copepod

TN: White Co.: Lost Creek Cave

G-rank: G5; This and the following two taxa are common epigean species (Reid, personal communication).

Acanthocyclops robustus (G.O. Sars) SX Robust copepod

TN: White Co.: Lost Creek Cave

G-rank: G5

Acanthocyclops vernalis (Fischer) SX Vernal copepod

TN: Rhea Co.: Marler Cave

G-rank: G5

#### ORDER HARPACTIDOIDA

#### FAMILY CANTHOCAMPTIDAE

Bryocamptus (Limocamptus) undescribed species SB/PB copepod

TN: Overton Co.: Mill Hollow Cave

G-rank: G1; This copepod was taken by dipping water from a shallow stream pool. Although a revision of the genus will be necessary to be certain, this material probably represents an undescribed species (Reid, email 2003). One other described species, <u>Bryocamptus</u> (<u>Limocamptus</u>) <u>morrisoni</u>, is known from two caves in southern Indiana and central Kentucky (Rouch 1986).

### ORDER OSTRACODA

### **FAMILY CANDONIDAE**

Pseudocandona jeanneli (Klie) SB Jeannel's groundwater ostracod

TN: Coffee Co.: Welchs Cave; Franklin Co.: Dry Cave, Keith Cave; Grundy Co.: Big Mouth Cave, Skull Cave; Overton Co.: Mill Hollow Cave

G-rank: G2; This species was previously known from several caves in southern Indiana and one cave on the Cumberland Escarpment in Pulaski County, Kentucky. Within Tennessee, the six caves reported above represent a distribution that spans much of the Cumberland Escarpment in the state.

Pseudocandona undescribed species SB groundwater ostracod

TN: Grundy Co.: Big Room Cave

G-rank: G1/2; This species is currently known from a cave in southern Indiana, two caves in Pulaski County, Kentucky and the site above. It was taken at all of these sites by dipping water from drip and rimstone pools. Although known only from 4 caves, the relatively widespread localities suggests that it is more common than the collection sites indicate.

Cyclocypris sharpei SX Sharpe's ostracod

TN: Rhea Co.: Marler Cave

G-rank: G4; This is an epigean species that was taken from a drip pool in Marler Cave.

#### ORDER ISOPODA

#### **FAMILY ASELLIDAE**

Caecidotea bicrenata bicrenata (Steeves) SB Two-toothed cave isopod

TN: Franklin Co.: Black Hole of Calcutta, Caney Hollow Cave, Caroline Cove Cave (Fleming 1972, Lewis 1982), Crownover Saltpeter Cave, Dry Cave (Steeves 1963), Little Crow Creek Cave, Lost Cove Cave (Fleming 1972, Lewis 1982), Mill Hollowhead Cave (Fleming 1972), Pitcher Ridge Cave (Fleming 1972, Lewis 1982), Putnam Spring Cave (Fleming 1972, Lewis 1982), seep 3.8 miles north Sherwood (Lewis 1982), seep 6.5 miles south Sewanee (Lewis 1982), Wet Cave (Steeves 1963); Grundy Co.: Big Mouth Cave (Fleming 1972), Crystal Cave, Trussell Cave, Woodlee Cave; Marion Co.: Bible Spring Cave, Speegle Cove Cave, White Cricket Cave; Putnam Co.: Wall Cave (Steeves 1963); Van Buren Co.: Cave Between the Caves, Camps Gulf Cave, Cummings Cove Cave, Glencora Spring Cave, Laurel Creek Cave, Palliser Cave, Pennywinkle Springs, Rumbling Falls Cave, Swamp River Cave, Swift Cave, Thunder Run Cave, Upper Cummings Cove Cave, Va-ju-de Cave; Warren Co.: Joint Cave, Jaco Spring Cave, Rocky River Cave; White Co.: Dairy House Cave (Steeves 1963), Haskell Cave (Lewis 1982), Indian Cave(Lewis 1982), Lost Creek Cave (Steeves 1963), Moore Cave (Fleming 1972, Lewis 1982), Rose Cave, Witt Cave

G-rank: G4; This species occurs in caves from northern Alabama through Tennessee north to central Kentucky, then west into southern Illinois (Lewis, 1982; Lewis and Bowman, 1981). It can be expected in almost any cave habitat, typically occurring in streams, as well as drip and rimstone pools.

Caecidotea circulus (Steeves & Holsinger) SB Circular cave isopod

TN: Bledsoe Co.: Aaron Tollett Cave (Fleming 1972); Cumberland Co.: Jewett Cave (Steeves & Holsinger 1968)

G-rank: G1; This species was described from Jewett Cave (Steeves & Holsinger 1968), and subsequently listed from Aaron Tollett Cave (Fleming 1972). Fleming's 1972 paper was replete with identification errors, so his record has to be viewed with some degree of reluctance. Caecidotea richardsonae also occurs in the same cave (see below).

Caecidotea nickajackensis (Cope & Packard) SB Nickajack cave isopod

TN: Bledsoe Co.: Aaron Tollett Cave (Steeves 1963)Marion Co.: Nickajack Cave (Cope & Packard 1881)

G-rank: G3; The status of this taxon is confused at present. Cope & Packard (1881) described C. nickajackensis from Nickajack Cave. Hay (1902) described Caecidotea richardsonae from the same site. Steeves (1969) described this as a glaring taxonomic error and Lewis (in progress) is synonymizing the species. The above G-rank reflects the range of the synonymy of these two species.

# Caecidotea richardsonae (Hay) SB Richardson's cave isopod

As noted above, this species is apparently a synonym of <u>C</u>. <u>nickajackensis</u>.

# Caecidotea scyphus (Steeves & Holsinger) SB cave isopod

TN: Cumberland Co.: Blowhole Cave (Steeves & Holsinger 1968)

G-rank: G1; This species is known only from the type-locality (Steeves & Holsinger 1968).

# Caecidotea stygia Packard SB Northern cave isopod

TN: Fentress Co.: Ace in the Hole, Cornstarch Cave, Fallen Entrance Cave, Mountain Eye Cave, Redbud Cave, Skillmans Mark Cave; Overton Co.: Baileys Webb Cave, Cole Cave (Steeves 1963), Garrett's Mill Cave, Indian Cave, Little Slippery Slit Cave, Mill Hollow Cave, Robinson Cave (Fleming 1972), Three Forks Cave, Upper Parrott Cave (Steeves 1963), Webb Cave; Pickett Co.: Bunkum Cave, cave near Bunkum Cave, Frog Cave

G-rank: G4; This species occurs in caves from central Indiana to northcentral Tennessee, west to Missouri and east into southern Ohio (Lewis and Bowman, 1981). It occurs in cave streams and drip pools.

# Caecidotea sp. SB cave isopod

TN: Rhea Co.: Raymer Cave

This collection is known from a single female isopod.

# Caecidotea forbesi (Williams) SX Forbe's isopod

TN: Fentress Co.: Mountain Eye Cave

G-rank: G5; This is a common epigean species that usually occurs in temporary ponds, flood pools, swamps and creeks. It was taken from under stones in the main stream passage of this cave far from the entrance – the presence of this species in this habitat is problematic. The isopod is otherwise one of the more widespread species and is found over a wide range in the Midwest and eastern United States (Williams 1970).

### Lirceus sp. SX isopod

TN: Cumberland Co.: Baker Cave, Bristow Spring Cave; Fentress Co.: Shane Cave; Grundy Co.: Trussell Cave; Overton Co.: Falling Springs Cave, Garrett's Mill Cave.

### FAMILY ARMADILLIDIDAE

Armadillidium nasatum Budde-Lund TX Nosed pillbug

**TN: Overton Co.**: Mill Hollow Cave, Three Forks Cave, Webb Cave G-rank: EX; This and the two following species are common threshold trogloxenes.

# <u>Armadillidium vulgare</u> (Latreille)

TN: Van Buren Co.: Sandstone Cave

G-rank: EX:

Cylisticus convexus DeGeer TX Common convex pillbug

TN: Pickett Co.: Bunkum Cave; Sequatchie Co.: Stone Cave

G-rank: EX

### FAMILY LIGIDAE

Ligidium elrodii (Packard) TP Elrod's terrestrial isopod

TN: Fentress Co.: Fallen Entrance Cave, Shane Cave; Franklin Co.: Black Hole of Calcutta; Grundy Co.: Payne Saltpeter Cave; Marion Co.: Clear Spring Cave; Overton Co.: Little Slippery Slit Cave, Slippery Slit Cave; Pickett Co.: cave near Bunkum Cave; Sequatchie Co.: Stone Cave; Van Buren Co.: Cummings Cove Cave, Upper Cummings Cove Cave, Va-ju-de Cave; Warren Co.: Rocky River Cave; White Co.: Indian Cave, Witt Cave

G-rank: G4; This species is semi-aquatic and frequently occurs in wet riparian detritus.

#### FAMILY TRICHONISCIDAE

Miktoniscus sp. (barri?) Vandel TB/TP Barr's terrestrial isopod

TN: Fentress Co.: Little Jack Creek Cave, Redbud Cave, Skillmans Mark Cave; Franklin Co.: Round Cove Cave; Grundy Co.: Tater Cave; Overton Co.: Falling Springs Cave; Warren Co.: Joint Cave

G-rank: G3/4; This questionably troglobitic species was described from Marengo Cave, Indiana and Columbia Caverns, Dickson Co., Tennessee (Vandel 1965). The taxonomic status of the genus makes identification of this isopod uncertain pending revision of the group. Lewis (1998) reported this species (again, identified tentatively) from seven other Indiana caves.

Miktoniscus medcofi (Fan Name) TP Medcof's terrestrial isopod

TN: Franklin Co.: Dry Cave

G-rank: G4; This species occurs over much of the eastern U.S. (Schultz 1976).

Haplophthalmus danicus Budde-Lunde TP terrestrial isopod

TN: Fentress Co.: Skillmans Mark Cave; Franklin Co.: Dry Cave; Grundy Co.: Coppinger Cave, Tater Cave; Marion Co.: Clear Spring Cave; Warren Co.: Smith Grove Cave #1

G-rank: EX; Vandel (1965) reported that this species was Mediterranean in origin, but has now been widely established in the U.S., where it frequents caves.

#### ORDER AMPHIPODA

#### **FAMILY CRANGONYCTIDAE**

Crangonyx antennatus Packard SB Appalachian cave amphipod

TN: Bledsoe Co.: Aaron Tolletts Cave (Zhang & Holsinger 2003); Cumberland Co.: Run-to-the-mill Cave (Zhang & Holsinger 2003); Marion Co.: Nickajack Cave (Zhang & Holsinger 2003), Whiteside Cave (Zhang & Holsinger 2003); Rhea Co.:

Dayton Quarry Cave (Zhang & Holsinger 2003), Grassy Creek Cave (Zhang & Holsinger 2003)

G-rank: G4; This species occurs over a relatively wide area in the southern Appalachians, including Georgia, Alabama, Tennessee into southwestern Virginia (Zhang & Holsinger 2003).

# Stygobromus exilis Hubricht SB cave amphipod G3

TN: Bledsoe Co.: Aaron Tollett's Cave; Fentress Co.: Buffalo Cove Cave, Cornstarch Cave; Redbud Cave, Wolf River Cave; Franklin Co.: Caney Hollow Cave, seeps near Sewanee; Marion Co.: Cedar Ridge Crystal Cave, Speegle Cove Cave; Overton Co.: Little Slippery Slit Cave; Pickett Co.: Bunkum Cave; Putnam Co.: Wall Cave

G-rank: G3; This is a relatively widespread (for a subterranean species) amphipod that occurs from the central Kentucky karst into southern Tennessee (Holsinger, email 2004).

# Stygobromus vitreus Cope SB cave amphipod

TN: Franklin Co.: Keith Cave, Round Mountain Cave

G-rank: G3; This species has a large disjunction between populations in Kentucky and southern Tennessee/Alabama, but there are no morphological differences that can be used to differentiate them (Holsinger email 2005).

# Stygobromus undescribed species 1 SB cave amphipod

TN: Overton Co.: Robinson Cave, Webb Cave

G-rank: G1; This undescribed species is endemic to Overton County, Tennessee (Holsinger, email 2004).

## Stygobromus undescribed species 2 SB Davis cave amphipod G3

TN: Coffee Co.: Cumberland Co.: Blowhole Cave, Run-to-the-Mill Cave; Franklin Co.: Dry Cave, seep near Sewanee; Grundy Co.: Big Mouth Cave, Big Room Cave, Crystal Cave, Dry Cave, Skull Cave, Trussell Cave, Woodlee Cave; Marion Co.: Nickajack Cave; Putnam Co.: Secret Cave; Van Buren Co.: Big Bone Cave, Camps Gulf Cave, Cave Between Caves, Fox Hole, Swamp River Cave, Va-ju-de Cave; Warren Co.: Cumberland Caverns, Hubbards Cave, Turkeyscratch Cave; White Co.: Indian Cave, Lost Creek Cave, Merrybranch Cave, Moore Cave, Ward Cave

G-rank: G3; This undescribed species is known from caves in the above 7 counties associated with the Cumberland Plateau.

### Stygobromus undescribed species 3 SB Bosnak's cave amphipod

Van Buren Co.: Big Bone Cave, Cagle Saltpeter Cave, Camps Gulf Cave, Cave Between Caves, McCoy Cave, Mini Pearl Cave; White Co.: Merrybranch Cave, Wards Cave

G-rank: G2; This undescribed species is known from a narrow range in White and Van Buren counties.

Stygobromus undescribed species 4 SB Southern cave amphipod

TN: Franklin Co.: Black Hole of Calcutta, Little Crow Creek Cave, Lost Cove Cave; Grundy Co.: Wonder Cave; Hamilton Co.: Spider Cave; Marion Co.: Honeycutt Cave

G-rank: G3; This species occurs in the Cumberland Plateau of northern Alabama generally continuous to north of Birmingham, into the adjacent part of Tennessee, then SSW to the northern part of the coastal plain (Holsinger email 2005).

Stygobromus undescribed species 5 SB Dickson's cave amphipod

TN: Franklin Co.: Stubblefield Pit

G-rank: G2; The discovery of the population represents a significant range distribution for this species, which was previously known from Alabama, Georgia and two records in Tennessee on Lookout Mountain (Holsinger email 2005).

Stygobromus species, possibly exilis SB cave amphipod

Sequatchie Co.: Keyhole Cave

This collection was a single juvenile specimen that resembles  $\underline{S}$ .  $\underline{exilis}$  (Holsinger email 2005)

Stygobromus species SB cave amphipod

Rhea Co.: Marler Cave

This collection was comprised of two juvenile specimens (Holsinger email 2005).

Crangonyx sp. TX amphipod

TN: Fentress Co.: Ace in the Hole, Mountain Eye Cave

### **FAMILY GAMMARIDAE**

Gammarus minus Say TP Lesser spring amphipod

TN: Grundy Co.: Trussell Cave; White Co.: Lost Creek Cave

G-rank: G5; This species is a common inhabitant of springs and spring runs in the eastern U.S. and in some areas troglomorphic cave populations occur (Holsinger, 1972).

## ORDER DECAPODA

## **FAMILY CAMBARIDAE**

Orconectes australis australis (Rhoades) SB Southern cave crayfish

TN: Coffee Co.: Welch Waterhole; Fentress Co.: Buffalo Cove (unspecified site Hobbs & Barr 1972, Cornstarch Cave (Moni email 2004, Fallen Entrance Cave, Mountain Eye Cave,) Redbud Cave, Sells Cave (Hobbs & Barr 1972), Wolf River Cave (Hobbs & Barr 1972); Franklin Co.: Caroline Cove Cave (Hobbs & Barr 1972), Partin Spring Cave (Hobbs & Barr 1972), Wet Cave (Hobbs & Barr 1972), Walker Spring Cave (Hobbs & Barr 1972), Grundy Co.: Bear Cave (Hobbs & Barr 1972), Big Mouth Cave (Hobbs & Barr 1972), Crystal Cave (Hobbs & Barr 1972), Skull Cave, Wonder Cave (Hobbs & Barr 1972); Overton Co.: Baileys Webb Cave, Mill Hollow Cave, Raven Bluff Cave (Hobbs & Barr 1972), Sheep Cave (Hobbs & Barr 1972); Putnam Co.: Blind Fish Cave (Hobbs & Barr 1972), Bridge Creek Cave (Hobbs & Barr 1972), Johnson Saltpeter Cave (Hobbs & Barr 1972); Van Buren Co.: Camps Gulf Cave, Laurel Creek

Cave, Rumbling Falls Cave, Swamp River Cave, Swift Cave, Thunder Run Cave; Warren Co.: Cumberland Caverns (Hobbs & Barr 1972), Jaco Spring Cave, Rocky River Cave, Turkeyscratch Cave (Hobbs & Barr 1972); White Co.: Indian Cave (Hobbs & Barr 1972), Lost Creek Cave, Rose Cave, Ross Cave (Hobbs & Barr 1972), Ward Cave (Hobbs & Barr 1972), Wildcat Cove Cave (Hobbs & Barr 1972), Witt Cave

G-rank: G3; Hobbs and Barr (1972) reported the range of this cave crayfish from northern Alabama (Jackson and Madison counties), then north-northeastward along the Cumberland Plateau to the area of Fentress County, Tennessee and adjacent Wayne County, Kentucky, where it then intergrades with <u>Orconectes australis packardi</u>. The Grank suggested here reflects this species position as a predator in aquatic cave communities.

## Cambarus hamulatus (Cope and Packard) SB cave crayfish

TN: Bledsoe Co.: Aaron Tollett's Cave (Barr, personal communication); Franklin Co.: Salt River Cave (Hobbs and Barr 1960)(entrance is in Jackson Co., AL; Marion Co.: Blowing Cave (TNHD), Drum Spring Cave (TNHD), Honeycutt Cave (Hobbs and Barr 1960), Lost Pig Cave (Hobbs and Barr 1960), Nickajack Cave (Cope & Packard 1881), Pryor Spring Cave (TNHD), Ship Cave (Hobbs and Barr 1960), Speegle Saltpeter Cave (Hobbs and Barr 1960), Winehouse Cave (Hay 1902); Sequatchie Co.: Keyhole Cave, Wilmoth Cave

G-rank: G2; This species is endemic to a narrow area of southern Tennessee.

## Cambarus tenebrosus Hay SP crayfish

TN: Fentress Co.: The Aqueduct, Hose Cave, Redbud Cave; Grundy Co.: Big Mouth Cave; Marion Co.: Bible Spring Cave, Pryor Spring Cave; Overton Co.: Cooler Cave, Slippery Slit Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Camps Gulf Cave, Glencora Spring Cave, Laurel Creek Cave, Rumbling Falls Cave, Swamp River Cave, Thunder Run Cave; Warren Co.: Jaco Spring Cave, Rocky River Cave; White Co.: Lost Creek Cave, Rose Cave

G-rank: G4; This species occurs in cave streams and other cold water habitats in Kentucky, Tennessee and Alabama (Hobbs, Jr, 1972).

# CLASS ARACHNIDA ORDER ARANEAE

### **FAMILY AGELENIDAE**

Cybaeus giganteus Banks TX Gigantic funnel-web spider

TN: Van Buren Co.: Black Hole with Water

G-rank: G4?; This species is the largest species in the genus. It was recorded from Chamberlin and Ivie (1932) from only two widely separated sites in eastern U.S., suggesting that it is an under-collected but common species.

Wadotes sp. TX funnel-web spider

TN: Van Buren Co.: Phineas Finn Cave

#### **FAMILY ARANEIDAE**

Araneus marmoreus Clerck TX Marbled spider

TN: Van Buren Co.: Plantagenet Hole

G-rank: G5

### FAMILY AMAUROBIIDAE

Callioplus pantoplus Bishop & Crosby TX spider

TN: Fentress Co.: Redbud Cave

G-rank: G4; This species was reported from 14 localities in Tennessee, Georgia, North Carolina and Kentucky by Leech (1972).

Coras taugynus Chamberlin TP funnel-web spider

TN: Franklin Co.: Joint Cave

G-rank: G3/4; This species was reported from caves as well a few other localities in Alabama, North Carolina and Tennessee (Muma 1946).

#### **FAMILY ANTRODIAETIDAE**

Antrodiaetus sp. TP Folding door trap-door spider

TN: Warren Co.: Joint Cave

These spiders are unusual cave inhabitants, but several of the trap-doors and the attendant spiders were noted in this cave on different visits.

#### FAMILY CTENIDAE

Anahita punctulata (Hentz) TX Southeastern wandering spider

TN: Warren Co.: Smith Grove Cave #1

G-rank: G3; This family is primarily tropical in distribution. Otherwise known no farther north than the Kentucky/Tennessee border, this species occurs in the southeastern U.S. and has been reported from 32 localities. Collection sites included numerous caves, woodrat nests and mesic woods (Peck, 1981; 1989).

TN: Warren Co.: Smith Grove Cave #1

### FAMILY CYTAUCHENIDAE

Myrmekiaphilia sp. TX spider

TN: Grundy Co.: Trussell Cave

### **FAMILY DICTYNIDAE**

Cicurina breviaria Bishop & Crosby TX/TP funnel-web spider

TN: Franklin Co.: Black Hole of Calcutta, Dry Cave, Stubblefield Pit; Grundy Co.: Crystal Cave

G-rank: 4; This species was reported by Chamberlin & Ivie (1940) from three localities on mountains in North Carolina. Barr (1961) reported it from Tennessee caves and Peck (1989) from a cave in Alabama. It is presumed to be under-collected rather than rare. In caves reported here it was associated with detritus and leaf litter.

Cicurina arcuata Keyserling TX funnel-web spider

TN: Grundy Co.: Tater Cave

G-rank: G5; This species is widespread in the eastern U.S. (Chamberlin & Ivie 1940), where it is occasionally a trogloxene.

Cicurina placida Banks TX/TP funnel-web spider

TN: Grundy Co.: Trussell Cave

G-rank: G4; This species was reported by Chamberlin & Ivie (1940) from two localities in New York and New Hampshire. Its presence in leaf litter in this Tennessee cave suggests that it is under-collected rather than rare.

### **FAMILY HAHNIIDAE**

Calymmaria persica (Hentz) TP/TX Cave-loving funnel-web spider

TN: Coffee Co.: Karls Cave; Fentress Co.: Mountain Eye Cave, Shane Cave; Grundy Co.: Coppinger Cave, Crystal Cave, Wanamaker Cave; Overton Co.: Dry Slit Cave, Webb Cave; Van Buren Co.: Cummings Cove Cave; Warren Co.: Smith Grove Cave #1

G-rank: G4; This spider is widespread in the southeastern U.S., but is sporadic in its occurrence. Contrary to the implication of the name of its junior synonym Calymmaria cavicola (first found in a cave), this species is not an obligate cavernicole, but frequents caves and crevice habitats.

Calymmaria virginica TX funnel-web spider

TN: Franklin Co.: Joint Cave; Warren Co.: Little Bat Cave

G-rank: G4

Calymmaria sp. TX spider

TN: Bledsoe Co.: Aaron Tollett's Cave; Grundy Co.: Payne Saltpeter Cave;

Overton Co.: Three Forks Cave; Warren Co.: Joint Cave, Storage Cave

These records are represented by juveniles, but are likely also C. persica.

### **FAMILY LEPTONETIDAE**

Appaleptoneta spp. TB leptonetid spider

TN: Fentress Co.: Skillmans Mark Cave; Overton Co.: Three Forks Cave; Van Buren Co.: Sandstone Cave; White Co.: Ghost River Cave

G-rank: G1; The leptonetids are small spiders that are known primarily from caves and detritus. The genus <u>Appaleptoneta</u> was erected by Platnick (1986) to receive seven Appalachian species, most of which are troglobites endemic to regional karst areas.

### FAMILY LINYPHIIDAE

Agyneta undescribed species TB Trussell cave sheet-web spider

TN: Grundy Co.: Trussell Cave (downstream)

G1; This species is known only from this locality.

# Anthrobia mammouthia Tellkampf TB Mammoth cave spider G3

TN: Bledsoe Co.: Aaron Tollett's Cave; Grundy Co.: Skull Cave; Van Buren Co.: Cane Creek Saltpeter Cave

G-rank: G3; This is linyphiid is completely eyeless and depigmented. It is widespread, but very sporadic in its occurrence.

## Centromerus latidens (Emerton) TX sheet-web spider

TN: Coffee Co.: Karls Cave; Grundy Co.: Tater Cave; Marion Co.: Excited Cow Cave, Skylight Cave, Speegle Cove Cave; Van Buren Co.: Swamp River Cave G4; This species is a common threshold trogloxene.

# Centromerus tennapex (Barrows) TX sheet-web spider

TN: Franklin Co.: Black Holeof Calcutta

G-rank: G4; This species was reported from localities from New York to Tennessee and west to Ohio (Van Helsdingen 1973).

# Eperigone maculata (Banks) TX sheet-web spider

TN: Overton Co.: Falling Spring Cave; Van Buren Co.: Swamp River Cave; Warren Co.: Hubbards Cave

G-rank: G4; This is a common spider in the eastern U.S. (Millidge 1987).

# Eperigone tridentata (Emerton) TX sheet-web spider

TN: Overton Co.: Webb Cave

G-rank: G4; This species was reported as widespread east of the Rocky Mountains (Millidge 1987).

# Lepthyphantes sabulosa (Keyserling) TX sheet-web spider

TN: Grundy Co.: Dry Cave

G4; This is a common spider that occurs from the eastern U.S. to Utah (Zorsch, 1937).

## Phanetta subterranea (Emerton) TB Subterranean sheet-web spider

TN: Coffee Co.: Welchs Cave, Welchs Water Hole; Cumberland Co.: Bristow Cave; Fentress Co.: Cornstarch Cave, Double Entrance Sink Cave, Flag Trail Cave, Little Jack Creek Cave, Mountain Eye Cave, Redbud Cave, Sand Cave, Shane Cave; Franklin Co.: Black Hole of Calcutta, Caney Hollow Cave, Dry Cave, Round Cove Cave, Walker Cave, Wet Cave; Grundy Co.: Big Mouth Cave, Big Room Cave, Coppinger Cave, Crystal Cave, Payne Saltpeter Cave, Skull Cave, Tater Cave, Trussell Cave, Woodlee Cave; Marion Co.: Clear Spring Cave, Pryor Spring Cave, Sequatchie Cave, White Cricket Cave; Overton Co.: Cooler Cave, Falling Springs Cave, Garrett's Mill Cave, Little Slippery Slit Cave, Marie Cave, Mill Hollow Cave, Three Forks Cave, Slippery Slit Cave; Pickett Co.: Bunkum Cave, Frog Cave; Rhea Co.: Marler Cave, Raymer Cave; Sequatchie Co.: Keyhole Cave, Wilmoth Cave; Van Buren Co.: Black Hole with Water, Cave Between Caves, Cagle Saltpeter Cave, Cane Creek Saltpeter Cave, Cummings Cove Cave, Laurel Creek Cave, Rumbling Falls Cave, Sandstone Cave, Swamp River Cave, Thunder Run Cave, Va-ju-de Cave; Warren Co.: Joint Cave,

Hubbard's Cave North, Jaco Spring Cave, Little Bat Cave, Rocky River Cave, Storage Cave; White Co.: Ghost River Cave, Rose Cave

G-rank: G5; This is a widespread, obligate subterranean species that occurs in caves of the Appalachians, Interior Low Plateaus and eastern Ozarks (Millidge, 1984).

# Porrhomma cavernicola (Keys) TB Cavernicolous sheet-web spider

Franklin Co.: Caney Hollow Cave; Grundy Co.: Tater Cave

G3; This spider is widespread, but very sporadic in its occurrence in the eastern U.S.

# Oreonetides undescribed species TB cave sheet-web spider

Marion Co.: Speegle Cove Cave

G1; This spider apparently belongs to a complex of related troglobitic spiders currently being described (Paquin pers. comm. 2005).

# Origanates rostratus Crosby & Bishop TX sheet-web spider

TN: Van Buren Co.: Swamp River Cave

G-rank: G5; This spider is common across the eastern United States in woodland habitats (Roth, 1988).

# Bathyphantes alboventris (Banks) TP sheet-web spider

TN: Warren Co.: Hubbards Cave

G-rank: G4

# Bathyphantes pallidus (Banks)TP Pallid sheet-web spider

TN: Franklin Co.: Black Hole of Calcutta, Round Cove Cave; Van Buren Co.:

Swamp River Cave; Warren Co.: Smith Grove Cave #1

G-rank: G5; This species is a widespread troglophile.

# Bathyphantes sp. TX spider

TN: Overton Co.: Mill Hollow Cave

#### **FAMILY LYCOSIDAE**

Allocosa funera (Hentz) TX wolf spider

TN: Fentress Co.: Fallen Entrance Cave

G-rank: G4; This species occurs in the eastern U.S. (Dondale & Redner 1983).

# Pirata sedentarius Montgomery TX Sedentary pirate wolf spider

TN: Fentress Co.: Fallen Entrance Cave

G-rank: G4: This species is a common trogloxene. Wolf spiders frequent riparian corridors and may follow them into caves.

### **FAMILY MYSMENIDAE**

Maymena ambita (Barrows) TP Minute cave spider

TN: Marion Co.: Pryor Spring Cave

G-rank: G3; Gertsch (1960) reported this species from 11 sites in Kentucky, Tennessee and Alabama, including several caves. Peck & Lewis (1978) added a cave in Illinois and Sutton (1993) added two caves in Missouri.

### **FAMILY NESTICIDAE**

Nesticus barri Gertsch TB Barr's cave spider G3

TN: Franklin Co.: Black Hole of Calcutta, Crownover Saltpeter Cave (Gertsch 1984), Custard Hollow Cave, (Hedin & Dellinger 2005), Fishtrap Cave (Gertsch 1984), Keith Cave (Hedin & Dellinger 2005), Little Crow Creek Cave, Lost Cove Cave (Gertsch 1984), Rane Willis Cave (Gertsch 1984), Round Cove Cave, Salt River Cave (Hedin & Dellinger 2005), Stubblefield Pit; Marion Co.: Excited Cow Cave, Honeycutt Cave (Gertsch 1984), Monteagle Saltpeter Cave (Hedin & Dellinger 2005), Nickajack Cave (Gertsch 1984), Tate Spring Cave (Hedin & Dellinger 2005), White Cricket Cave

G-rank: G3; In addition to the above localities, Gertsch (1984) reported this species from numerous caves in Alabama. Hedin & Dellinger (2005) synonymized Nesticus valentinei with Nesticus barri.

Nesticus dilutus Gertsch TB Grassy creek cave spider

TN: Rhea Co.: Grassy Creek Cave

G-rank: G1; This species is known only from the type locality (Gertsch 1984, Hedin & Dellinger 2005).

Nesticus pecki TB Hedin & Dellinger Peck's cave spider

TN: Marion Co.: Monteagle Saltpeter Cave

G-rank: G1; This species is known only from the type-locality (Hedin & Dellinger 2005).

Nesticus stygius Gertsch TB Stygian cave spider

**TN: Overton Co.**: Obe Lee Cave (Gertsch 1984), Raven Bluff Cave (Gertsch 1984), Three Forks Cave (Gertsch 1984), Webb Cave (Gertsch 1984)

G-rank: G1; Gertsch (1984) reported this species from the above 4 sites.

Nesticus tennesseensis (Petrunkevitch)TP Tennessee cave spider

TN: Van Buren Co.: Thunder Run Cave

G-rank: G3; These spiders were taken from under stones in the dark zone of Thunder Run Cave. This species occurs in eastern Tennessee, western Virginia and eastern West Virginia, primarily in caves (Gertsch, 1984).

### **FAMILY PHOLCIDAE**

Pholcus sp. TX Long-bodied cellar spider

TN: Marion Co.: Speegle Cove Cave

This may be <u>Pholcus phalangiodes</u>, which occasionally occurs as a threshold trogloxene in dry cave entrances.

#### **FAMILY PISAURIDAE**

**Dolomedes** scriptus Hentz TX fishing spider

**TN:** Fentress Co.: The Aqueduct, Flag Trail Cave, Hose Cave, Little Jack Creek Cave, Mountain Eye Cave; Pickett Co.: Bunkum Cave

G4; This species occurs throughout the eastern U.S., where it is usually found near streams. It is an occasional threshhold trogloxene. All of the caves in which it was found are on the edge of creeks.

#### **FAMILY TENGELLIDAE**

Liocranoides tennesseensis Platnick TP Tennessee two-clawed spider

TN: Cumberland Co.: Saltpeter Cave (Platnick 1999); Putnam Co.: Wall Cave (Platnick 1999); Warren Co.: Cumberland Caverns (Platnick 1999)

G-rank: G2; Platnick (1999) described this species from 5 caves and 1 leaf litter habitat in eastern and central Tennessee.

Liocranoides archeri Platnick TB Archer's two-clawed spider

TN: Franklin Co.: Keith Cave; Grundy Co.: Crystal Cave (Platnick 1999), Payne Saltpeter Cave; Marion Co.: Skylight Cave; Warren Co.: Joint Cave, Storage Cave

G-rank: G2; Platnick (1999) described this species from 8 caves in northern Alabama as well as one locality in Tennessee. It is known only from caves.

# Liocranoides TP Two-clawed spider

TN: Bledsoe Co.: Aaron Tollett's Cave; Cumberland Co.: Bristow Cave; Fentress Co.: Alastor Resurgence Cave, Flag Trail Cave, Little Jack Creek Cave, Shane Cave; Franklin Co.: Crownover Saltpeter Cave, Dry Cave, Joint Cave; Grundy Co.: Crystal Cave; Marion Co.: Excited Cow Cave, Speegle Cove Cave; Overton Co.: Three Forks Cave; Pickett Co.: Frog Cave; Warren Co.: Smith Grove Cave #1

G-rank: G2; Platnick (1999) described several endemic species in the genus <u>Liocranoides</u> from the Appalachian region. These records are probably <u>L</u>. <u>tennesseensis</u>, <u>L</u>. <u>archeri</u> or <u>L</u>. <u>gertschi</u>, but an adult specimen will be needed to identify the species. All are G1-G2 in global rarity.

### **FAMILY TETRAGNATHIDAE**

Meta ovalis Gertsch (TP/TX) American cave orb weaver

TN: Coffee Co.: Lusk Cave; Fentress Co.: cave near Green Bottle Cave, Double Entrance Sink Cave, Fallen Entrance Cave, Flag Trail Cave, Hose Cave, Little Jack Creek Cave, Redbud Cave, Sand Cave, Shane Cave, Skillmans Mark Cave; Overton Co.: Baileys Webb Cave, Mill Hollow Cave, Webb Cave,; Pickett Co.: Bunkum Cave, Frog Cave; Van Buren Co.: Black Hole with Water, Cummings Cove Cave, Laurel Creek Cave, Swift Cave, Va-ju-de Cave; White Co.: Rose Cave, Witt Cave G-rank: G5; This spider is ubiquitous in caves of eastern U.S.

#### **FAMILY THERIDIDAE**

Achaearanea tepidariorum (Koch) TX House spider

TN: Fentress Co.: cave near Green Bottle Cave; Grundy Co.: Wanamaker Cave; Van Buren Co.: Antelope Cave, Rotifer Cave; Warren Co.: Hubbards Cave, Smith Grove Cave #1

G-rank: G5; This spider is ubiquitous in dry bluffs.

### ORDER PSEUDOSCORPIONIDA

#### **FAMILY CHERNETIDAE**

Hesperochernes mirabilis (Banks) TB/TP Eastern cave pseudoscorpion

TN: Cumberland Co.: Mill Cave (Muchmore unpublished data); Fentress Co.: Cornstarch Cave, Little Jack Creek Cave, Reed Creek Cave (Muchmore unpublished data), Shane Cave; Franklin Co.: Caney Hollow Cave; Grundy Co.: Coppinger Cave, Payne Saltpeter Cave; Marion Co.: Excited Cow Cave; Overton Co.: Marie Cave, Mill Hollow Cave; Putnam Co.: Ament Cave (unpublished data, Muchmore), Mine Lick Cave (unpublished data, Muchmore); Van Buren Co.: McElroy Cave (unpublished data, Muchmore); Warren Co.: Cumberland Caverns (unpublished data, Muchmore), Joint Cave, Storage Cave; White Co.: Ghost River Cave, Sparkman Cave (unpublished data, Muchmore)

G-rank: G4; This species is frequently associated with woodrat debris. Although the taxonomy of the species is questionable (Muchmore, personal communication), at present it is considered a single species known only from caves in the southeastern U.S. (Muchmore 1974).

#### **FAMILY CHTHONIDAE**

Kleptochthonius barri Muchmore TB Barr's cave pseudoscorpion

**TN: Grundy Co.**: Boyd Hollow Cave (Muchmore 1965), Dry Cave, Skull Cave, Tater Cave, Tom Campbell Cave (Muchmore 1965), Woodlee Cave; **Warren Co.**: Hobbs Cave (Muchmore 1965), Joint Cave, Little Bat Cave

G-rank: G2; This is a relatively large (for a pseudoscorpion) species with reduced eyes and very elongate palps. The localities are clustered in an area around the typelocality in southern Warren County and adjacent Grundy County.

Kleptochthonius charon Muchmore TB cave pseudoscorpion

**TN: Bledsoe Co.**: Aaron Tolletts Cave (Muchmore 1965), Lowe Gap Cave (Muchmore 1965)

G-rank: G1; This species is known only from these two localities.

Kleptochtonius daemonius Muchmore TB McElroy cave pseudoscorpion

**TN:** Van Buren Co.: Cagle Saltpeter Cave, Camps Gulf Cave, Cane Creek Saltpeter Cave, Cave Between Caves, Laurel Creek Cave, McElroy Cave (Muchmore, 1965), Sandstone Cave, Swamp River Cave, Va-ju-de Cave; White Co.: Indian Cave, Lost Creek Cave, Ward Cave, Witt Cave

G-rank: G2; This species was previously known only from McElroy Cave, Van Buren County, Tennessee (Muchmore, 1965).

Kleptochthonius infernalis Malcolm and Chamberlin TB Infernal pseudoscorpion

TN: Cumberland Co.: Saltpeter Cave

G-rank: G1; This species was described from Saltpeter Cave in Grassy Cove by Malcolm and Chamberlin (1961).

<u>Kleptochthonius pluto</u> Muchmore TB Pluto's cave pseudoscorpion

**TN: Overton Co.**: Bailey's Webb Cave, Garretts Mill Cave, Indian Cave, Little Slippery Slit Cave, Marie Cave, Mill Hollow Cave, Raven Bluff Cave (Muchmore 1965), Slippery Slit Cave, Webb Cave

G-rank: G1; The Mill Hollow Cave locality is based on a single juvenile that appears to be this species, but an adult is necessary to be certain. This may be the same locality as the Mill Cave of Malcolm & Chamberlin (1961). The specimens from the localities above agree with Muchmore's (1965) description and are clustered in the vicinity of the type-locality. Several of these caves are parts of the same system or immediately adjacent to one another and are thus single element occurrences for the species.

<u>Kleptochthonius rex</u> Malcolm and Chamberlin TB Bunkum Cave pseudoscorpion **TN: Pickett Co.**: Bunkum Cave

G-rank: G1; Previously described from Bunkum Cave by Malcolm and Chamberlin (1961), this species was found in riparian detritus during this project.

Kleptochthonius stygius Muchmore TB Stygian cave pseudoscorpion

TN: Putnam Co.: Sadler Cave (Muchmore 1965)

G-rank: G1; This species is known only from the type-locality.

Kleptochthonius tantalus Muchmore TB cave pseudoscorpion

TN: Franklin Co.: Dry Cave (Muchmore 1966)

G-rank: G1; This species is known only from the type-locality.

Kleptochthonius magnus Muchmore TP cave pseudoscorpion

TN: Franklin Co.: Dry Cave (Muchmore 1966)

G-rank: G1; This species is known only from the type-locality.

Kleptochthonius undescribed species TB Round Cove cave pseudoscorpion

TN: Franklin Co.: Round Cove Cave

G-rank: G1; The specimens from this cave are dissimilar in chaetotaxy and structures of the chelae of other members of the genus from Franklin and Grundy counties, and none are described from the adjacent area of Alabama.

Kleptochthonius undescribed species TB Sells cave pseudoscorpion

TN: Fentress Co.: Sells Cave

G-rank: G1: This record is from unpublished data of W. Muchmore.

Kleptochthonius undescribed species TP pseudoscorpion

TN: Van Buren Co.: Black Hole with Water; Warren Co.: Smith Grove Cave #1

G-rank: G1; The specimens from these two caves are "gray-handed" pseudoscorpions related to <u>K</u>. <u>magnus</u>, but differ from the description of that species and appear to represent an undescribed troglophilic species (Muchmore personal communication).

# Apochthonius minor Muchmore TB/ED pseudoscorpion

TN: Van Buren Co.: Upper Cummings Cove Cave

G-rank: G1; Specimens collected from this cave were tentatively identified as this species by Muchmore, which is otherwise known from litter at the entrance to Parker cave and Morrison Cave, both in Georgia (Muchmore 1976). In the description Muchmore pointed out that it was unusual to find an <u>Apochthonius</u> in which the second pair of eyes were reduced or absent outside of a cave (at Parker Cave). He suggested that the species was edaphic/troglobitic.

# Apochthonius undescribed species TB pseudoscorpion

TN: Franklin Co.: Round Mountain Cave

G-rank: G1; This record is from unpublished records provided by Dr. William Muchmore.

# Tyrannochthonius fiski Muchmore TB Fisk's cave pseudoscorpion

TN: Franklin Co.: Caroline Cove Cave

G-rank: G1; This species is known only from the above cave (Muchmore 1996).

## Tyrannochthonius halopotamus Muchmore TB Salt River cave pseudoscorpion

TN: Franklin Co.: Salt River Cave

G-rank: G1; This species is known only from the above cave (Muchmore 1996). The entrance of Salt River Cave is in Jackson County, Albama, with the passage then extending into Franklin County, Tennessee.

# Tyrannochthonius steevesi Muchmore TB Steeve's cave pseudoscorpion

TN: Pickett Co.: Pratt Cave

G-rank: G1; This species is known only from the type-locality (Muchmore 1996).

### **FAMILY NEOBISIDAE**

Microcreagris nickajackensis Muchmore TB Nickajack cave pseudoscorpion

TN: Marion Co.: Nickajack Cave

G-rank: G1; This species is known only from the type-locality (Muchmore 1966).

## Microbisium parvulum (Banks) TX Little pseudoscorpion

TN: Franklin Co.: Mill Hollow Head Cave

G-rank: G5; This is a widespread species across North America into Mexico and central America (Harvey 1990).

#### **FAMILY SYARINIDAE**

<u>Chitrella</u> <u>archeri</u> Malcolm & Chamberlain TB Archer's cave pseudoscorpion

TN: Grundy Co.: Trussell Cave, Wonder Cave

G-rank: G1; The troglomorphic species was described from Wonder Cave and Piper Cave (Smith Co., TN) by Malcolm & Chamberlain (1960) with the Trussell Cave locality a tentative identification from unpublished data of William Muchmore.

### **ORDER OPILIONES**

### **FAMILY CLADONYCHIDAE**

Theromaster undescribed species TP harvestman

TN: Van Buren Co.: Cummings Cove Cave

G-rank: G1; This species is distinct from <u>Theromaster brunnea</u> (reported from caves in adjacent Alabama by Peck, 1989) and is known only from this cave.

Erebomaster sp. TP harvestman

TN: Grundy Co.: Trussell Cave

### FAMILY NEMASTOMATIDAE

Hesperonemastoma sp. TP harvestman

TN: Grundy Co.: Wanamaker Cave

Nemasatosoma sp. TP harvestman

TN: Van Buren Co.: Va-ju-de Cave

### FAMILY PHALANGODIDAE

<u>Phalangodes appalachius</u> (Goodnight and Goodnight) TB Appalachian cave harvestman **TN:** Coffee Co.: Lusk Cave (Peck, 1989); Franklin Co.: Walker Spring Cave

(Peck, 1989), Wet Cave (Peck, 1989); **Grundy Co.**: Big Mouth Cave (Peck, 1989), Crystal Cave (Peck, 1989), Wonder Cave (Peck, 1989); **Marion Co.**: Monteagle

Saltpeter Cave (Peck, 1989); Overton Co.: Mill Cave; Putnam Co.: Bridge Creek Cave;

Van Buren Co.: Big Bone Cave (Peck, 1989), Cummings Cove Cave, McElroy Cave (Peck, 1989); Warren Co: Cumberland Caverns (Peck, 1989)

G-rank: G2; Peck (1989) reported this species from 12 caves along the edge of the Cumberland Plateau in Tennessee and one in Alabama. A single specimen was found in a woodrat latrine in Cummings Cove Cave.

Phalangodes undescribed species TB cave harvestman

TN: Grundy Co.: Big Mouth Cave, Big Room Cave, Coppinger Cave, Crystal Cave, Dry Cave, Tater Cave, Woodlee Cave; Overton Co.: Slippery Slit Cave; Warren Co.: Rocky River Cave, Storage Cave

G-rank: G2; Some of the localities listed above as <u>Phalangodes appalachius</u> appear to actually be an undescribed species (Ubick email 2005).

Bishopella sp. probably laciniosa (Crosby & Bishop) TP harvestman

TN: Bledsoe Co.: Aaron Tollett's Cave; Fentress Co.: Sand Cave; Franklin Co.: Caney Hollow Cave, Dry Cave; Marion Co.: Bible Spring Cave, Pryor Spring Cave, Skylight Cave; Rhea Co.: Marler Cave; Sequatchie Co.: Keyhole Cave, Stone Cave, Wilmoth Cave

#### FAMILY PHALANGIIDAE

Leiobunum elegans (Weed) TX Elegant harvestman

TN: Coffee Co.: Karl's Cave, Lusk Cave; Fentress Co.: Flag Trail Cave, Hose Cave, Little Jack Creek Cave, Sand Cave; Franklin Co.: Little Crow Creek Cave; Overton Co.: Garretts Mill Cave, Mill Hollow Cave; Franklin Co.: Dry Cave, Walker Cave, Wet Cave; Grundy Co.: Dry Cave; Overton Co.: Little Slippery Slit Cave, Slippery Slit Cave, Slit Shelter Cave; Pickett Co.: Bunkum Cave, Frog Cave, unnamed cave near Bunkum Cave; Van Buren Co.: Glencora Spring Cave, Handcracker Cave, Laurel Creek Cave, Phineas Finn Cave, Plantagenet Hole, Swamp River Cave, Thunder Run Cave; Warren Co.: Joint Cave

G-rank: G5; This harvestman is a thresh-hold trogloxene that commonly overwinters in caves.

### FAMILY SABACONIDAE

Sabacon sp. TX milliped

TN: Grundy Co.: Skull Cave; Overton Co.: Mill Hollow Cave, Little Slippery Slit Cave

# CLASS DIPLOPODA ORDER CHORDEUMATIDA

### **FAMILY CLEIDOGONIDAE**

Pseudotremia acheron Shear TB cave milliped

**TN: Van Buren Co.**: McElroy Cave (Shear 1972); **Warren Co.**: Cumberland Caverns (Shear 1972), Smith Grove Cave #1

G-rank: G1; The Smith Grove Cave #1 record is based on an adult female cyphopod which matches that described for this species, but a male will be necessary for confirmation. This cave is about a mile from the type-locality.

Pseudotremia minos Shear TB Russell cave milliped

TN: Franklin Co.: Black Hole of Calcutta, Round Cove Cave, Marion Co.: Excited Cow Cave, White Cricket Cave

G-rank: G1; This species was previously known only from Russell Cave, in adjacent Alabama (Shear 1972).

### Pseudotremia rhabdamanthus Shear TB cave milliped

TN: Marion Co.: Monteagle Saltpeter Cave (Shear 1972)

G-rank: G1; This species is otherwise known only from a cave in Marshall Co., Alabama (Shear 1972).

<u>Pseudotremia</u> undescribed species 1 TB Wallace's cave milliped

TN: Pickett Co.: Bunkum Cave, Frog Cave

G-rank: G1; The two caves from which this species was taken are adjacent to one another in the same valley. This species is most closely related to <u>Pseudotremia acheron</u> in Warren and Van Buren counties and <u>Pseudotremia</u> undescribed species 4 described below (Lewis in preparation).

Pseudotremia undescribed species 2 TB Mann's cave milliped

TN: Overton Co.: Baileys Webb Cave, Mill Hollow Cave

G-rank: G1; Although males were not present in the sample, the <u>Pseudotremia</u> in Webb Cave (400 feet from Baileys Webb Cave), are presumably also this taxon. This species is most closely related to <u>P</u>. <u>merops</u> (Adair Co., Kentucky) and <u>P</u>. <u>spira</u> (Pulaski Co., Kentucky)(Lewis in preparation).

Pseudotremia undescribed species 3 TB Roebucks' cave milliped

TN: Fentress Co.: Fallen Entrance Cave, Shane Cave

G-rank: G1; <u>Pseudotremia</u> were also found in Skillmans Mark Cave, which is in Buffalo Cove near Fallen Entrance and Shane caves, and are probably also this taxon. Male specimens will be necessary to confirm this. This species does not appear to be closely related to any known <u>Pseudotremia</u> (Lewis in preparation).

Pseudotremia undescribed species 4 TB Garland's cave milliped

TN: Fentress Co.: Redbud Cave

G-rank: G1; Other caves in the Jim Creek Preserve from which juvenile <u>Pseudotremia</u> probably referable to this taxon were The Aqueduct, Flag Trail Cave and Hose Cave. This species is most closely related to <u>Pseudotremia</u> undescribed species 1 and <u>P</u>. <u>acheron</u> (Lewis in preparation).

Pseudotremia undescribed species 5 TB Three Forks cave milliped

TN: Overton Co.: Mill Hollow Cave, Three Forks Cave

G-rank: G1; This species is known only from these two caves.

Pseudotremia undescribed species 6 TB Slippery slit cave milliped

**TN: Overton Co.**: Dry Slit Cave, Little Slippery Slit Cave, Slippery Slit Cave, Garretts Mill Cave, Indian Cave

G-rank: G1; This undescribed species is known only from these caves. The millipeds are unpigmented and have reduced eyes.

Pseudotremia undescribed species 7 TB Barr's cave milliped

TN: Grundy Co.: Big Room Cave, Big Mouth Cave, Crystal Cave, Payne Saltpeter Cave, Trussell Cave; Warren Co.: Hubbard's Cave, Joint Cave, Little Bat Cave, Wanamaker Cave

G-rank: G2; This gonopods of this species are similar to that of  $\underline{P}$ . soco, an epigean species from North Carolina. The Crystal Cave species shares the elongate lateral process that curves across the center of the gonopod, but differs in the lack of a second decurved spine-like process on the lateral process.

Pseudotremia undescribed species 8 TB Skylight cave milliped

**TN:** Marion Co.: Cedar Ridge Crystal Cave, Skylight Cave, Speegle Cove Cave G-rank: G1; The gonopods of this species are similar to those of undescribed species 7 above, with a simple, elongate lateral process that curves across the center of the gonopod. The medial process of undescribed species 9 has a prominent spine that is absent in P. undescribed species 7.

Pseudotremia undescribed species 9 TB Holliday's cave milliped

TN: Sequatchie Co.: Keyhole Cave

G-rank: G1; This species is known only from this locality.

Pseudotremia undescribed species 10 TB Baker cave milliped

TN: Cumberland Co.: Baker Cave, Baker Annex Cave

G-rank: G1; This species is known only from these caves, which are parts of the same system.

Pseudotremia sp. TB cave milliped

TN: Fentress Co.: Mountain Eye Cave; Grundy Co.: Dry Cave, Skull Cave, Woodlee Cave; Marion Co.: Bible Spring Cave, Clear Spring Cave; Sequatchie Co.: Sequatchie Cave, Wilmoth Cave; Warren Co.: Rocky River Cave, Storage Cave; White Co.: Indian Cave, Witt Cave

Only juveniles/females were found in these caves, which are not closely geographically associated with any of the sites listed above for other <u>Pseudotremia</u>. Males will be needed from these localities for identification beyond genus.

Cleidogona undescribed species TX milliped

TN: Grundy Co.: Big Mouth Cave

G1; This is an epigean species that at present is known only from this locality.

### FAMILY TRICHOPETALIDAE

Scoterpes copei (Packard) TB Cope's cave milliped

TN: Fentress Co.: Cornstarch Cave, Redbud Cave, Shane Cave

G-rank: G3; This species was redescribed by Shear (1972) from specimens from the vicinity of the type-locality at Mammoth Cave, Kentucky. The range of this species extends into northcentral Tennessee, where it is replaced by <u>Scoterpes ventus</u> (Shear, personal communication).

Scoterpes ventus Shear TB cave milliped

TN: Franklin Co.: Dry Cave; Grundy Co.: Crystal Cave, Dry Cave, Skull Cave, Wanamaker Cave, Woodlee Cave; Marion Co.: Pryor Spring Cave, Sequatchie Cave (type-locality); Overton Co.: Baileys Webb Cave, Mill Hollow Cave, Slippery Slit Cave, Webb Cave

Falling Springs Cave; **Sequatchie Co.**: Wilmoth Cave; **Van Buren Co.**: Camps Gulf Cave, Cave Between Caves, Cummings Cove Cave, Glencora Spring Cave, Laurel Creek Cave, Little Bat Cave, McElroy Cave, Mill Hollow Cave, Palliser Cave, Swamp River

Cave, Thunder Run Cave, Upper Cummings Cove Cave, Va-ju-de Cave, **Warren Co.**: Joint Cave, Rocky River Cave, Storage Cave; **White Co.**: Ghost River Cave, Indian Cave, Lost Creek Cave

G-rank: G3; This species was previously reported only from the typelocality at Blowing Cave, Marion County, Tennessee (Shear, 1972). Shear (email, 2001) reported that he had examined specimens representing a few other populations that are tentatively assigned to this species. This milliped has a strong tendency to occur on walls and ceilings, possibly to avoid competition with other co-occurring troglobitic milliped species.

# Scoterpes undescribed species TB cave milliped

**TN:** Franklin Co.: Caney Hollow Cave, Caroline Cove Cave (Shear email 2005), Crownover Cave (Shear email 2005), Keith Cave, Lost Cove Cave (Shear email 2005), Round Mountain Cave(Shear email 2005), Salt River Cave (Shear email 2005)

G-rank: G2; Most of the localities for this species, which Shear (email 2005) refers to as <u>Scoterpes</u> new species #3, are in caves in Jackson Co, Alabama.

# Scoterpes undescribed species TB cave milliped

TN: Rhea Co.: Marler Cave, Raymer Cave

G-rank: G1; This species, which Shear (email 2005) refers to as <u>Scoterpes</u> new species #18, is known only from the above localities.

# Scoterpes sp. TB cave milliped

TN: Marion Co.: Clear Spring Cave, White Cricket Cave

#### ORDER CALLIPODIDA

#### **FAMILY ABACIONIDAE**

Tetracion tennesseensis Causey TB Tennessee cave milliped

TN: Grundy Co.: Big Mouth Cave, Big Room Cave, Coppinger Cave, Crystal Cave, Dry Cave, Payne Saltpeter Cave, Tater Cave, Wanamaker Cave, Woodlee Cave; Van Buren Co.: Cane Creek Saltpeter Cave, Cave Between Caves, Case Brothers Cave, Cummings Cove Cave, Glencora Spring Cave, Laurel Creek Cave, McElroy Cave, Palliser Cave, Phineas Finn Cave, Rumbling Falls Cave, Sandstone Cave, Swamp River Cave, Swift Cave, Thunder Run Cave, Upper Cummings Cove Cave; Warren Co.: Joint Cave, Hubbard's Cave South, Jaco Spring Cave, Little Bat Cave, Rocky River Cave, Smith Grove Cave #1, Storage Cave; White Co.: Ghost River Cave, Indian Cave, Rose Cave

G-rank: G4; This species was previously known only a few caves in Warren, White, Van Buren and Grundy counties in middle Tennessee (Hoffman, 1999; Barr, email 2001). Although the range is relatively limited, this milliped is abundant in most of the caves sampled within that area.

Tetracion jonesi Hoffman TB Jone's cave milliped

**TN:** Franklin Co.: Black Hole of Calcutta, Round Cove Cave, Keith Cave G-rank: G4; This species replaces <u>Tetracion tennesseenisis</u> in Franklin County and is common in caves of the adjacent part of Alabama (Hoffman 1956, Peck 1989).

Abacion sp. TX milliped

TN: Fentress Co.: Little Jack Creek Cave; Franklin Co.: Keith Cave; Overton Co.: Garrett's Mill Cave, Little Slippery Slit Cave; Rhea Co.: Marler Cave; Van Buren Co.: Cagle Saltpeter Cave, Cummings Cove Cave, Palliser Cave, Plantagenet Hole; Warren Co.: Joint Cave, Storage Cave

These records are based on a juveniles. These millipeds are forest floor inhabitants that sometimes enter caves.

### **ORDER SPIROBOLIDA**

### FAMILY SPIROBOLIDAE

Narceus americanus (Beauvois) TX American forest milliped

TN: Fentress Co.: Ace in the Hole, cave near Green Bottle Cave; Franklin Co.: Black Hole of Calcutta

G-rank: G4; This is large milliped is a common woodland species that sometimes enters cave entrances.

#### ORDER SPIROSTREPTIDA

### **FAMILY CAMBALIDAE**

Cambala sp. TP/TX milliped

TN: Franklin Co.: Caney Hollow Cave Marion Co.: Two Barrel Cave; Pickett Co.: Bunkum Cave; Warren Co.: Joint Cave

These records are based on juveniles.

#### **ORDER POLYDESMIDA**

#### FAMILY MACROSTERNODESMIDAE

Chaetaspis mollis (Causey)TB Cave milliped

**TN:** Van Buren Co.: Camps Gulf Cave, Cave Between Caves, Thunder Run Cave

G-rank: G1; One male was found in Camps Gulf Cave. A female <u>Chaetaspis</u> reported by Lewis (2001) from Thunder Run Cave is placed here as this species based on the range, but a male is needed to confirm the identification.

Chaetaspis sp. TB cave milliped

TN: Grundy Co.: Payne Saltpeter Cave

This may be another locality for the above species, but the female specimen precludes identification.

## **FAMILY POLYDESMIDAE**

Pseudopolydesmus erasus (Loomis) TX milliped

TN: Grundy Co.: Crystal Cave; Marion Co.: Speegle Cove Cave; Sequatchie Co.: Stone Cave

G-rank: G4; This species occurs in the southern Appalachians to southern Illinois (Hoffman 1999).

## Pseudopolydesmus sp. TX milliped

TN: Fentress Co.: Sand Cave; Franklin Co.: Keith Cave; Marion Co.: Skylight Cave; Overton Co.: Little Slippery Slit Cave; Warren Co.: Storage Cave

These are records of juvenile millipeds. The members of this genus are forest floor inhabitants that occasionally wander into caves.

## Scytonotus granulatus Say TX Granulate milliped

**TN:** Van Buren Co.: Black Hole with Water, Swamp River Cave, Upper Cummings Cove Cave; White Co.: Witt Cave

G-rank: G4; This is an occasional cavernicole that otherwise typically occurs in forest litter across the southeastern U.S. (Shelley, 1994).

### FAMILY PARADOXOSOMATIDAE

Oxidus gracilis (Koch) TX Greenhouse milliped

TN: Bledsoe Co.: Aaron Tollett Cave; Cumberland Co.: Bristow Cave, Bristow Spring Cave; Franklin Co.: Dry Cave; Grundy Co.: Coppinger Cave, Skull Cave; Marion Co.: Pryor Spring Cave; Overton Co.: Cooler Cave, Garrett's Mill Cave, Indian Cave, Marie Cave; Pickett Co.: Bunkum Cave; Warren Co.: Hubbard's Cave North, Little Bat Cave; Van Buren Co.: Indian Cave

G-rank: EX; This is a noxious, invasive species that occurs in caves to the extent of sometimes covering the floors and walls. It is thought to have originated in Japan, although this is uncertain (Hoffman 1999, Lewis 2003).

## **ORDER JULIDA**

#### FAMILY ZOSTERACTINIDAE

Ameractis satis Causey TP milliped

TN: Grundy Co.: Skull Cave; Marion Co.: Clear Spring Cave; Overton Co.: Little Slippery Slit Cave, Mill Cave (Causey 1959); Rhea Co.: Marler Cave, Raymer Cave; Sequatchie Co.: Wilmoth Cave; White Co.: Indian Cave (type-locality of Causey 1959)

G-rank: G4; Hoffman (1999) listed the range of this species as encompassing caves in the Cumberland Plateau area of Tennessee and Alabama, as well as the southern Appalachians in southwestern Virgina and western North Carolina.

## **FAMILY JULIDAE**

Ophyiulus pilosus (Newport) TX/TP Garden milliped

TN: Pickett Co.: Bunkum Cave; Sequatchie Co.: Keyhole Cave; Van Buren Co.: Swamp River Cave; White Co.: Indian Cave

G-rank: EX; This is an exotic species, probably originating in Europe (Hoffman 1999).

### **CLASS COLLEMBOLA**

### FAMILY ENTOMOBRYIDAE

Pseudosinella alba (Packard) TP White springtail

TN: Fentress Co.: Redbud Cave

G-rank: G4; This is a widespread species frequently found in caves (Christiansen & Bellinger, 1998c).

## Pseudosinella collina Wray TP springtail

TN: Marion Co.: Sequatchie Cave; Rhea Co., Raymer Cave; Van Buren Co.: Cummings Cove Cave

G-rank: G3/4; This taxon may represent a species complex. It has been recorded from 8 eastern states from Louisiana to Pennsylvania (Christiansen & Bellinger, 1998).

# Pseudosinella hirsuta (Delamare) TB/TP Hirsute cave springtail

TN: Bledsoe Co.: Aaron Tollett's Cave; Fentress Co.: Sells Cave (Christiansen personal communication); Franklin Co., Walker Cave; Pickett Co.: Pratt Cave (Christiansen personal communication); Warren Co., Hubbards Cave; White Co.: Ghost River Cave

G-rank: G2; This species is known from only one surface locality, otherwise from caves in Kentucky, Tennessee, Alabama, Georgia and Virginia (Christiansen & Bellinger, 1998c).

# Pseudosinella orba Christiansen TB springtail

TN: Fentress Co.: Cornstarch Cave; Pickett Co.: Bunkum Cave

G-rank: G2; Christiansen and Bellinger (1998c) listed 7 localities for this species in Tennessee, Virginia and West Virginia.

### Pseudosinella spinosa (Delamare) TB Spinose cave springtail

TN: Grundy Co.: Big Room Cave, Coppinger Cave; Van Buren Co.: Glencora Spring Cave, McElroy Cave, Palliser Cave, Swamp River Cave G-rank: G2; This is the largest of the North American <u>Pseudosinella</u> and is highly troglomorphic, with no trace of pigmentation or eyes. It has been recorded from caves in northeastern Alabama, northwestern Georgia and eastern Tennessee (Christiansen, 1998).

### Pseudosinella aera Christiansen & Bellinger TP springtail

TN: Bledsoe Co.: Aaron Tollett's Cave; Cumberland Co., Bristow Cave; Franklin Co.: Caney Hollow Cave; Grundy Co., Payne Saltpeter Cave, Skull Cave, Tater Cave, Wanamaker Cave; Overton Co., Slippery Slit Cave; Van Buren Co.: Swamp River Cave; Warren Co.: Little Bat Cave

G-rank: G4; This species is a troglomorphic troglophile that is known primarily from caves, but has been recorded from rare surface collections. First described from

Cumberland Caverns, Warren County, Tennessee, it has been found from Alabama north to Illinois and west into Louisiana and central Texas (Christiansen & Bellinger, 1998).

Pseudosinella cf. aera Christiansen & Bellinger TP springtail

TN: Cumberland Co.: Bristow Cave

Pseudosinella christianseni Salmon TB Christiansen's cave springtail

TN: Franklin Co.: Caney Hollow Cave, Keith Cave; Grundy Co.: Wanamaker Cave, Woodlee Cave; Marion Co.:, Cedar Ridge Crystal Cave, Pryor Spring Cave, Speegle Cove Cave; Overton Co., Garrett's Mill Cave, Three Forks Cave; Sequatchie Co.: Wilmoth Cave; Van Buren Co.: Cave Between Caves, Glencora Spring Cave; Warren Co.:Joint Cave, Little Bat Cave, Storage Cave; White Co.: Ghost River Cave G-rank: G2; This species is a highly troglomorphologic relative of P. hirsuta and probably represents a species complex known in Kentucky, Tennessee, Alabama and Georgia (Christiansen & Bellinger, 1998).

Pseudosinella pecki Christiansen & Bellinger TB Peck's cave springtail

TN: Cumberland Co.: Baker Cave, Bristow Spring Cave; Franklin Co.: Dry
Cave

G-rank: G2; These are the first records for Tennessee, the species otherwise known from caves in Georgia, Alabama and Georgia (Christiansen & Bellinger 1998c).

<u>Pseudosinella</u> cf. <u>christianseni</u> TB cave springtail

TN: Van Buren Co.: Sandstone Cave

Pseudosinella cf. gisini TB cave springtail

TN: Cumberland Co.: Bristow Spring Cave

Pseudosinella cf. nata TB cave springtail

TN: Franklin Co.: Keith Cave

Pseudosinella undescribed species #1 TB Undescribed cave springtail

**TN:** Van Buren Co.: Camps Gulf Cave, Cummings Cove Cave, Sandstone Cave, Swamp River Cave, Va-ju-de Cave; White Co.: Ghost River Cave

G-rank: G1; This undescribed species is known only from the above collections and is endemic to the Van Buren/White counties area.

Pseudosinella undescribed species #2 TB Undescribed cave springtail

TN: White Co.: Indian Cave

G-rank: G1; This undescribed species is known only from this locality.

Pseudosinella undescribed species near nata TB Undescribed cave springtail

TN: Van Buren Co.: Upper Cummings Cove Cave

G-rank: G1; This species is known only from this locality.

## Pseudosinella sp. TB springtail

TN: Franklin Co.: Caney Hollow Cave; Grundy Co.: Coppinger Cave; Van Buren Co.: Case Brothers Cave, Handcracker Cave; Warren Co.: Little Bat Cave Only juveniles were taken and can not be identified to species.

Sinella cavernarum (Packard) TB Cavernicolous springtail

TN: Fentress Co.: Redbud Cave; Overton Co.: Dry Slit Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Upper Cummings Cove Cave

G-rank: G4; Christiansen (1960b) reported this collembolan from caves in Indiana, Kentucky, Tennessee, Missouri and Pennsylvania, as well as an endogenous grave collection in the District of Columbia.

## Lepidocyrtus helenae Snider TX Helen's springtail

TN: Van Buren Co.: Rofifer Cave

G-rank: G3; This species was reported by Christiansen & Bellinger (1998) from 12 widespread sites form Connecticut to Texas. It has also been reported from caves, where the populations are depigmented.

### FAMILY HYPOGASTRURIDAE

Hypogastrura sp., denticulata group TP/TX springtail

**TN:** Overton Co.: Bluff Spring Cave (Christiansen personal communication) This springtail is part of a group of related undescribed species.

# Hypogastrura essa Christiansen & Bellinger TX springtail

**TN:** Overton Co.: Bluff Spring Cave (Christiansen personal communication) G-rank: G4; This species is widespread in North America (Christiansen & Bellinger, 1998a).

# Hypogastrura undescribed species, viatica group TP/TX springtail

TN: Van Buren Co.: Cummings Cove Cave

G-rank: G1; This undescribed species is known only from this site.

### Ceratophysella sp. TP springtail

TN: Bledsoe Co.: Aaron Tollett's Cave; Overton Co.: Indian Cave, Mill Hollow Cave; Van Buren Co.: Sandstone Cave; Warren Co.: Hubbard's Cave, Storage Cave

# Neanura undescribed species TB undescribed springtail

TN: Van Buren Co.: Swamp River Cave

G-rank: G1; This undescribed species is known only from the Rumbling Falls Cave System, where it was collected in Swamp River Cave.

## Sensillanura barberi TP Barber's springtail

TN: Van Buren Co.: Va-ju-de Cave

G-rank: G4; The status of this species remains uncertain, but as presently understood it occurs throughout the eastern U.S.

## Triacanthella copelandi (Wray) TP Copeland's springtail G2

TN: Van Buren Co.: Va-ju-de Cave, Laurel Creek Cave; White Co.: Lost Creek Cave

G-rank: G2; This species was previously known from two collections in Sevier and White counties, Tennessee

#### **FAMILY ISOTOMIDAE**

Cryptopygus sp. TX springtail

TN: Lost Creek Cave

## Isotomiella minor (Schaffer)TX springtail

TN: Van Buren Co.: Camps Gulf Cave

G-rank: G4; This is a common litter species that occurs across the U.S.

## Folsomia stella Christiansen and Bellinger TP Stellate springtail

TN: Van Buren Co.: Cummings Cove Cave; White Co.: Indian Cave

G-rank: G4; As presently understood this is a relatively common species, although the taxonomy is confused and the interpretation of the species is subject to change.

# Folsomia undescribed species near macrochaeta TP springtail

TN: White Co.: Indian Cave

G-rank: G1; This undescribed species is known only from this site.

### **FAMILY ONYCHIURIDAE**

Onychiurus undescribed species TB undescribed springtail

TN: Van Buren Co.: Swamp River Cave

G-rank: G1; This species, similar to  $\underline{O}$ .  $\underline{bimus}$ , is known only from a collection in Swamp River Cave

### Onychiurus sp. TB springtail

TN: White Co.: Indian Cave, Lost Creek Cave

These collections represented only by juveniles are probably the above taxon.

### **FAMILY SMINTHURIDAE**

Arrhopalites benitus (Folsom) TX/TP springtail

TN: Fentress Co.: Redbud Cave

G-rank: G4; This is a widespread species that has been recorded in sporadic localities across the U.S. (Christiansen & Bellinger, 1998d).

## Arrhopalites caecus (Tullberg) TP springtail

TN: Pickett Co.: Bunkum Cave

G-rank: G4; This is a widespread species that has been recorded from numerous caves. The true range is problematic since some of the records are dubious (Christiansen & Bellinger, 1998d).

Arrhopalites marshalli Christiansen & Bellinger TB Marshall's cave springtail

TN: Grundy Co.: Dry Cave, Skull Cave; Overton Co.: Three Forks Cave, Webb Cave

G-rank: G2; This species was previously reported from two caves in Virginia, where it co-occurred with <u>A</u>. <u>pavo</u> at one of the sites (Christiansen & Bellinger 1996). These two species also co-occur in Dry Cave, Grundy County.

Arrhopalites pavo Christiansen & Bellinger TB cave springtail

**TN: Grundy Co.**: Crystal Cave, Dry Cave; **Overton Co.**: Three Forks Cave G-rank: G2; This species was previously reported from two caves in Virginia (Christiansen & Bellinger 1996).

<u>Arrhopalites</u> <u>pygmaeus</u> (Wankel) TP springtail

TN: Cumberland Co.: Bristow Cave, Bristow Spring Cave; Fentress Co.: Cornstarch Cave, Redbud Cave; Marion Co.: Clear Spring Cave; Overton Co.: Little Slippery Slit Cave, Slippery Slit Cave, Slippery Slit Shelter Cave; Pickett Co.: Bunkum Cave; Sequatchie Co.: Keyhole Cave; Van Buren Co.: Cagle Saltpeter Cave, Camps Gulf Cave, Cane Creek Saltpeter Cave, Cave Between Caves, Fox Hole, Swamp River Cave, Va-ju-de Cave; Warren Co.: Hubbards Cave; White Co.: Ghost River Cave, Witt Cave

G-rank: G4; This species as currently understood is a widespread troglophile, but is currently under study and may actually comprise a complex of species.

Arrhopalites undescribed species 1 TB undescribed cave springtail

**TN:** Van Buren Co.: Glencora Spring Cave, Palliser Cave G-rank: G1; This is an undescribed species known only from these caves.

Arrhopalites undescribed species 2 near bimus TB undescribed cave springtail

TN: Cumberland Co.: Baker Cave

G-rank: G1; The specimens are essentially indistinguishable from those of  $\underline{\underline{A}}$  bimus, a species known only from two caves in Indiana. It is placed here as an undescribed species due to the zoogeographic dissimilarities.

Arrhopalites undescribed species 3 near benitus TB undescribed cave springtail

TN: Bledsoe Co.: Aaron Tolletts Cave

G-rank: G1; This species is known only from the above cave.

Arrhopalites undescribed species 4 near lacuna TB undescribed cave springtail

TN: Warren Co.: Storage Cave

G-rank: G1; This species is known only from the above cave.

Arrhopalites sp. TB/TP springtail

TN: Van Buren Co.: Laurel Creek Cave

### Ptenothrix atra (Linnaeus)TX springtail

TN: Pickett Co.: Bunkum Cave; White Co.: Lost Creek Cave

G-rank: G5; This species occurs across the U.S. and occasionally turns up in caves (Christiansen & Bellinger, 1998d).

# Ptenothrix marmorata (Packard) TX springtail

TN: Van Buren Co.: Black Hole with Water

G-rank: G5; This species occurs primarily east of the Rocky Mountains.

## Ptenothrix quadrangularis Mills TX springtail

TN: Fentress Co.: Redbud Cave

G-rank: G1; This species was previously known from a single specimen from Iowa (Christiansen & Bellinger, 1998d). It is poorly known and the identification was done with some doubt due to the questionable nature of the original description.

### **FAMILY TOMOCERIDAE**

Tomocerus bidentatus Folsom TP Two-toothed springtail

TN: Cumberland Co.: Baker Annex Cave, Bristow Cave, Bristow Spring Cave; Franklin Co.: Caney Hollow Cave, Dry Cave; Grundy Co.:, Trussell Cave, Woodlee Cave; Overton Co.: Bailey's Webb Cave, Dry Slit Cave, Garrett's Mill Cave, Indian Cave, Mill Hollow Cave, Slippery Slit Cave, Three Forks Cave; Rhea Co.:, Marler Cave, Raymer Cave; Sequatchie Co., Keyhole Cave, Stone Cave; Van Buren Co.: Black Hole with Water, Cane Creek Saltpeter Cave, Cave Between Caves, Cummings Cove Cave, Sandstone Cave, Upper Cummings Cove Cave; Warren Co.: Hubbard's Cave, Joint Cave, Storage Cave; White Co.: Lost Creek Cave

G-rank: G4; This species is a troglomorphic troglophile known primarily from caves, but also a few surface records. Its range includes an area of 10 eastern states from Maryland west to Illinois and south to Alabama.

### Tomocerus dubius Christiansen TP springtail

TN: Fentress Co.: Redbud Cave; Grundy Co., Coppinger Cave, Skull Cave; Marion Co.: Clear Spring Cave; Rhea Co.: Raymer Cave; Sequatchie Co., Stone Cave G-rank: G4; This is a widespread species that is a frequent troglophile (Christiansen & Bellinger, 1998c).

## Tomocerus flavescens (Tullberg) TP Golden springtail

TN: Fentress Co.: Redbud Cave, Reed Cave (Christiansen personal communication); Marion Co.: Pryor Spring Cave, Sequatchie Cave; Overton Co.: Garrett's Mill Cave; Warren Co.: Hubbard's Cave, Storage Cave; Van Buren Co.: Antelope Cave, Cave Between Caves, Swift Cave

G-rank: G5; This troglophilic species occurs in caves across North America and many surface records are also known (Christiansen & Bellinger, 1998c).

## Tomocerus missus Mills TB Relict cave springtail

**TN: Grundy Co.**: Big Mouth Cave; **Overton Co.**: Little Slippery Slit Cave G-rank: G1-2; This is a complex of rare troglobitic species

Tomocerus vulgaris (Tullberg) TX Vulgar springtail

TN: Van Buren Co.: Glencora Spring Cave, Va-ju-de Cave

G-rank: G4; This species occurs over much of the U.S., but is only an occasional cavernicole.

Tomocerus undescribed species TP springtail G1

TN: Overton Co.: Cooler Cave

G-rank: G1; This species is known only from this locality.

# CLASS INSECTA ORDER DIPLURA

### FAMILY CAMPODEIDAE

Litocampa cookei TB Cooke's cave dipluran

TN: Bledsoe Co.: Aaron Tollett's Cave, Lowe Gap Cave (Ferguson pers. comm. 2005); Coffee Co.: Burk Cave (Ferguson pers. comm. 2005); Cumberland Co.: Baker Cave, Bristow Cave, Bristow Spring Cave, Grassy Cove Saltpeter Cave (Ferguson pers. comm. 2005); Fentress Co.: Cornstarch Cave, Redbud Cave; Franklin Co.: Wet Cave; Marion Co.: Nickajack Cave (Ferguson pers. comm.. 2005); Overton Co.: Little Slippery Slit Cave. Slippery Slit Cave, Three Forks Cave, Webb Cave

G-rank: G3; This is a widespread troglobitic species that occurs from central Kentucky into western Virginia (Ferguson email 2004).

## Litocampa valentinei TB Valentine's cave dipluran

TN: Coffee Co.: Welchs Cave; Franklin Co.: Caney Hollow Cave, Caroline Cove Cave (Ferguson pers. comm. 2005), Dry Cave, Keith Cave, Putnam Spring Cave (Ferguson pers. comm. 2005), Ranie Willis Cave (Ferguson pers. comm. 2005), Round Mountain Cave (Ferguson pers. comm. 2005), White Cricket Cave; Grundy Co.: Big Mouth Cave, Big Room Cave, Crystal Cave, Partin Spring Cave (Ferguson pers. comm. 2005), Tater Cave, Trussell Cave; Marion Co.: Pryor Spring Cave

G-rank: G3; This species is known from the Tennessee counties above as well as caves in adjacent Alabama and Georgia.

## Litocampa undescribed species 1 TB undescribed cave dipluran

**TN:** Fentress Co.: Fallen Entrance Cave, Shane Cave, Skillmans Mark Cave G-rank: G1; This species is endemic to caves in Buffalo Cove and is closely related to an undescribed species occurring in eastern Kentucky caves (Ferguson email 2004).

Litocampa undescribed species 2 TB undescribed cave dipluran

TN: Overton Co.: Mill Hollow Cave

G-rank: G1; This is also closely related to an undescribed species occurring in eastern Kentucky caves (Ferguson email 2004).

<u>Litocampa</u> undescribed species 3 TB undescribed cave dipluran

**TN: Fentress Co.**: Mountain Eye Cave

G-rank: G1; This species resembles the taxon in Webb Cave, although there are differences and in some ways they are more similar to the undescribed species from eastern Kentucky.

Litocampa undescribed species 4 TB undescribed cave dipluran

TN: Franklin Co.: Crownover Saltpeter Cave; Grundy Co.: Coppinger Cave; Sequatchie Co.: Keyhole Cave, Wilmoth Cave; Van Buren Co.: Big Bone Cave (Ferguson pers. comm. 2005), Cagle Saltpeter Cave, Camps Gulf Cave, Cave Between Caves, Laurel Creek Cave, McElroy Cave, Rumbling Falls Cave, Sandstone Cave, Swamp River Cave, Thunder Run Cave, Upper Cummings Cove Cave; Warren Co.: Cumberland Caverns (Ferguson pers. comm. 2005); White Co.: Lost Creek Cave

G-rank: G3; This species, new to science, has also been taken from caves in northern Alabama and Georgia (Ferguson, email 2001).

Podocampa undescribed species ED undescribed dipluran

TN: Franklin Co.: Keith Cave

G-rank: G1; This species is edaphic/troglophilic and is known from one other specimen collected in a West Virginia cave (Ferguson email 2005).

### ORDER ORTHOPTERA

### FAMILY RHAPHIDOPHORIDAE

Euhadenoecus puteaus (Scudder) TX cave cricket

TN: Cumberland Co.: Grassy Cove Saltpeter Cave (Hubbell 1978); Fentress Co.: small cave in bottom of Buffalo Cove (Hubbell 1978); Marion Co. Little Cedar Mountain Quarry Cave (Hubbell 1978), Moonshine Cave (Hubbell 1978), Nickajack Cave (Hubbell 1978); Pickett Co.: Bunkum Cave (Hubbell 1978); Putnam Co.: Bridge Creek Cave (Hubbell 1978); Van Buren Co.: Cummings Cove Cave, Phineas Finn Cave, Upper Cummings Cove Cave, Va-ju-de Cave

G-rank: G4; This is the most widespread and common of this genus of crickets. This species typically occurs in forested talus slopes, the bases of sandstone cliffs, wooded ravines, and the twilight zones of caves that occur in these habitats. It never penetrates cave to any distance beyond the entrance (Hubbell 1978). For example, it occurs on the slopes of Grassy Cove as well as Grassy Cove Saltpeter Cave.

## Hadenoecus barri Hubbell TP Barr's cave cricket

TN: Franklin Co.: Dry Cave (Hubbell 1978); Grundy Co.: Crystal Cave, Skull Cave; Marion Co.: Kimball Cave (Hubbell 1978), Logging Camp Cave (Hubbell 1978); Warren Co.: cave in Savage Gulf (Hubbell 1978), Cumberland Caverns (type-locality of Hubbell 1978), Hubbard's Cave (Hubbell 1978), Jaco Spring Cave, Joint Cave, Little Bat Cave, Nunelly Cave (Hubbell 1978), Payne Saltpeter Cave (Hubbell 1978), Smith Grove Cave #1, Storage Cave, Wonder Cave (Hubbell 1978)

G-rank: G4; This species occupies the area between the ranges of <u>H</u>. <u>opilionoides</u> to the north and H. jonesi to the south and appears to be allopatric (Hubbell 1978).

## Hadenoecus jonesi Hubbell TP Jone's cave cricket

TN: Franklin Co.: Black Hole of Calcutta, Caroline Cove Cave (Hubbell 1978); Lincoln Co.: Elora Spring Cave (Hubbell 1978), Round Cove Cave; Marion Co.: Excited Cow Cave, Honeycutt Cave (Hubbell 1978), White Cricket Cave

G-rank: G3/4; This species was reported from 46 caves in northeastern Alabama and a small part of adjacent Tennessee (Hubbell 1978).

## Hadenoecus opilionoides Hubbell TP cave cricket

TN: Fentress Co.: Alastar Resurgence Cave, The Aqueduct, cave near Green Bottle Cave, Cornstarch Cave, Double Entrance Sink Cave, East Fork Saltpeter Cave (Hubbell 1978), Fallen Entrance Cave, Flag Trail Cave, Hose Cave, Little Jack Creek Cave, Mountain Eye Cave, Redbud Cave, Sand Cave, Shane Cave, small cave in east face of Buffalo Cove (Hubbell 1978), small cave in north end of Buffalo Cove (Hubbell 1978), Skillmans Mark Cave, Strawberry Sink Cave (Hubbell 1978); **Overton Co.**: Baileys Webb Cave, Cooler Cave, Copeland Saltpeter Cave (Hubbell 1978), Dry Slit Cave, Ealey Cave (Hubbell 1978), Falling Springs Cave (Hubbell 1978), Garretts Mill Cave, Gigur Cave (Hubbell 1978), Indian Cave, Little Slippery Slit Cave, Mill Hollow Cave, Slit Shelter Cave, Three Forks Cave (Hubbell 1978), Wash Lee Cave (Hubbell 1978), Webb Cave; Pickett Co.: Bunkum Cave (Hubbell 1978), Frog Cave; **Putnam Co.**: Bridge Creek Cave (Hubbell 1978), Johnson Cave (Hubbell 1978), Slippery Slit Cave, Talent Hollow Cave (Hubbell 1978), TTU Cave (Hubbell 1978), Verble Falls Cave (Hubbell 1978); Van Buren Co.: Big Bone Cave (Hubbell 1978), Big Bone Cave East (Hubbell 1978), Cagle Saltpeter Cave, Cane Creek Saltpeter Cave, Cliffside Cave (Hubbell 1978), Laurel Creek Cave (Hubbell 1978), McElroy Cave (Hubbell 1978); Indian Cave (type-locality of Hubbell 1978), Lost Creek Cave (Hubbell 1978), Sandstone Cave Virgin Falls Cave (Hubbell 1978), Ward Cave (Hubbell 1978)

G-rank: G4; This species is endemic to Tennessee, where it has been found in caves along the western edge of the Cumberland Plateau and the adjacent part of the Highland Rim (Hubbell 1978).

### Hadenoecini sp. Hubbell TP cave cricket

TN: Bledsoe Co.: Aaron Tollets Cave; Cumberland Co.: Baker Cave, Baker Annex Cave; Marion Co.: Clear Spring Cave; Sequatchie Co.: Stone Cave

## FAMILY GRYLLACRIDIDAE

Ceuthophilus stygius TX cave cricket

TN: Fentress Co.: Little Jack Creek Cave, Saltpeter Cave (Hubbell 1936), Shane Cave; Overton Co.: Baileys Webb Cave, Dry Slit Cave, Garretts Mill Cave, Little Slippery Slit Cave, Slippery Slit Cave, Slit Shelter Cave, Webb Cave

G-rank: G4; This species occurs in caves from Indiana to central Tennessee (Hubbell 1936).

## Ceuthophilus gracilipes vs. stygius TX cave cricket

TN: Van Buren Co.: Case Brothers Cave, Phineas Finn Cave, Plantagenet Hole

G-rank: G4; Van Buren County is on the boundary of the range of these two species (Hubbell, 1936). A series of adult specimens will be necessary to differentiate what species is present due to the difficulties in the taxonomy of this species group (Cohn email 2002).

# Ceuthophilus ensifer Packard TX cave cricket

**TN:** Van Buren Co.: Case Brothers Cave, Cummings Cove Cave, Phineas Finn Cave, Plantagenet Hole; White Co.: Indian Cave

G-rank: G3; Hubbell (1936) noted this species from few localities, but unpublished records are now known from the Cumberland Plateau area in Tennessee, Alabama and Georgia (Cohn email 2002).

# Ceuthophilus spp. TX cave cricket

TN: Bledsoe Co.: Aaron Tolletts Cave; Cumberland Co.: Bristow Cave, Bristow Spring Cave; Franklin Co.: Caney Hollow Cave; Grundy Co.: Crystal Cave, Skull Cave, Tater Cave, Wanamaker Cave; Marion Co.: Clear Spring Cave, Pryor Spring Cave; Van Buren Co.: Rumbling Falls Cave, Thunder Run Cave; Warren Co.: Storage Cave

<u>Ceuthophilus</u> crickets were found in almost every cave visit, only a few of which are listed here – most of those found in the south Cumberlands are probably <u>C</u>. gracilipes.

#### ORDER PSOCOPTERA

# Psyllipsocus ramburi Selys-Longchamps TP psocid

TN: Grundy Co.: Coppinger Cave, Dry Cave, Payne Saltpeter Cave; Franklin Co.: Caney Hollow Cave; Marion Co.: Excited Cow Cave, Pryor Spring Cave; Overton Co.: Baileys Webb Cave, Indian Cave; Warren Co.: Hubbards Cave West

G-rank: G4; Barr (1961) identified this as the species occurring in Tennessee caves. These psocids are often found around animal burrows or woodrat nests.

#### **ORDER COLEOPTERA**

#### **FAMILY AGYRTIDAE**

Necrophilus pettitii Horn TX Pettit's carrion beetle

**TN:** Franklin Co.: Caney Hollow Cave; Grundy Co.: Coppinger Cave, Skull Cave, Wannamaker Cave; Sequatchie Co.: Stone Cave.

G-rank: G4; This species occurs across the eastern U.S. (Anderson & Peck 1985) and is occasionally found near the entrances to caves on carrion bait.

### FAMILY ANTHICIDAE

Tomoderus impressulus Casey TX anthicid beetle

TN: Fallen Entrance Cave, Skillmans Mark Cave

G-rank: G4

### **FAMILY CARABIDAE**

Anillinus undescribed species ED/TB undescribed ground beetle

TN: Fentress Co.: Flag Trail Cave

G-rank: G1; The beetles of this genus are all tiny (1.3-3.2mm), depigmented, eyeless and all are either strict edaphobites or perhaps troglobites (Barr 1995).

Anillinus undescribed species ED/TB undescribed ground beetle

TN: Grundy Co.: Skull Cave

G-rank: G1; The single specimen of this new species was taken from the breakdown slope below the entrance – it was only 1.7mm in length.

Anillinus species ED/TB ground beetle

**TN:** Franklin Co.: Keith Cave; Grundy Co.: Wanamaker Cave These collections may be additional localities of the species cited above.

<u>Darlingtonea</u> <u>kentuckensis</u> Valentine TB Darlington cave beetle

TN: Fentress Co.: Sells Cave

G-rank: G3; This monotypic genus is known only from caves of east-central Kentucky and north-central Tennessee.

Nelsonites walteri Valentine TB Walter's cave beetle

TN: Fentress Co.: Buffalo Cove Cave (Barr email 2005), Cornstarch Cave, Mountain Eye Cave, Xanadu Cave (Barr email 2005); Overton Co.: Obe Lee Cave (Barr email 2005), Webb Cave; Pickett Co.: Bunkum Cave; Putnam Co.: Johnson Saltpeter Cave (Valentine 1952); Van Buren Co.: Camps Gulf Cave, McElroy Cave, Rice Cave (Barr email 2005), Rumbling Falls Cave, Upper Cummings Cove Cave; White Co.: Dairyhouse Cave (Barr email 2005),

G-rank: G2; The range of the species is from Fentress County through Overton, Putnam and White counties to Van Buren County. The Bunkum Cave record is a sight record by J.R. Holsinger and needs confirmation. <u>Nelsonites walteri</u> is a rare species everywhere that it has been found (Barr email 2001).

## cumberlandus species group

Pseudanophthalmus undescribed species TB Jim Creekcave ground beetle

TN: Fentress Co.: Ace in the Hole

G-rank: G1; This species is known only from a single female from this cave.

Pseudanophthalmus undescribed species TB Caney Hollow cave ground beetle

TN: Franklin Co.: Caney Hollow Cave

G-rank: G1; This species is known only from this cave.

### engelhardti species group

Pseudanophthalmus humeralis Valentine TB cave beetle

TN: Franklin Co.: Caroline Cove Cave (Valentine 1931, Barr 2004), Dry Cave; Grundy Co.: Big Mouth Cave, Crystal Cave (Valentine 1931, Barr 2004), Wonder Cave (Valentine 1931, Barr 2004)

G-rank: G1; This species is known from a narrow range in southern Grundy County into adjacent Franklin County.

## Pseudanophthalmus nickajackensis Barr TB Nickajack cave beetle

TN: Marion Co.: Nickajack Cave

G-rank: G1; This species is known only from the type-locality, which was flooded in 1967 by the Nickajack reservoir (Barr 2004). The cave is now inundated and the status of the beetle remains uncertain.

### hirsutus species group

Pseudanophthalmus ventus Barr TB cave beetle

TN: Marion Co.: Blowing Cave

G-rank: G1; This species is known only from the type-locality (Barr 2004).

# intermedius species group

Pseudanophthalmus undescribed species TB cave ground beetle

TN: Overton Co.: Falling Springs Cave

G-rank: G1; This species is known only from this cave, where it is sporadically abundant on the detritus rich mudbank in the rear of the cave.

## <u>Pseudanophthalmus</u> undescribed species TB Lost Creek Cave beetle

**TN:** Van Buren Co.: Cave Between Caves, Laurel Creek Cave, McCoy Cave, Rumbling Falls Cave; White Co.: Lost Creek Cave

G-rank: G1; This species, new to science, is related to  $\underline{P}$ .  $\underline{mccradyi}$  and is known only from these caves (Barr, personal communication).

# Pseudanophthalmus intermedius (Valentine) TB Intermediate cave beetle

**TN:** Franklin Co.: Dry Cave; Grundy Co.: Big Room Cave, Crystal Cave, Wonder Cave (Barr 2004)

G-rank: G2; Barr (2004) reported the range of this species as Franklin and Grundy counties, Tennessee.

### Pseudanophthalmus macradyi Valentine TB Macrady's cave beetle

TN: Grundy Co.: Skull Cave, Tom Campbell Cave, Wanamaker Cave; Warren Co.: Cumberland Caverns, Grissom Quarry Cave, Hobbs Cave, Pickett Pit, Turkeyscratch Cave

G-rank: G2; This species is known from caves in eastern Warren and northern Grundy counties (Barr 2004).

Pseudanophthalmus templetoni Valentine TB Templeton's cave beetle

TN: Grundy Co.: Coppinger Cave, Wanamaker Cave, Woodlee Cave; Warren Co.: Cumberland Caverns (Barr 2004), Storage Cave

G-rank: G2; Barr (2004) reported the range of this species from caves in the Collins River basin in southern Warren County into northern Grundy County.

Pseudanophthalmus vanburenensis Barr TB Vanburen cave beetle

TN: Putnam Co.: Blindfish Cave (Barr email 2005); Van Buren Co.: McElroy Cave (Barr, 1959;1962), Swamp River Cave; Warren Co.: Rocky River Cave

G-rank: G1; This species was previously known only from McElroy Cave (Barr 1962). Six specimens of the beetle were taken with the more plentiful <u>P</u>. <u>robustus</u> in Swamp River Cave.

## jonesi species group

Pseudanophthalmus jonesi Valentine TB Jone's cave beetle

**TN:** Cumberland Co.: Blowhole Cave (Barr 2004), Grassy Cove Saltpeter (Valentine 1945), Mill Cave (Barr 2004).

G-rank: G1; This species is known only from the above caves in Grassy Cove.

<u>Pseudanophthalmus</u> undescribed species TB Aaron Tolletts cave beetle

TN: Bledsoe Co.: Aaron Tolletts Cave

G-rank: G1; This species is known only from this cave.

Pseudanophthalmus undescribed species TB Baker cave beetle

TN: Cumberland Co.: Baker Cave

G-rank: G1: This species is known only from this cave.

Pseudanophthalmus undescribed species TB Keyhole cave beetle

TN: Sequatchie Co.: Keyhole Cave, Wilmoth Cave

G-rank: G1; The samples from these two caves are placed together here, but may represent two different species.

Pseudanophthalmus undescribed species TB Wilmoth cave beetle

TN: Sequatchie Co.: Wilmoth Cave

G-rank: G1; This species is distinct from the above taxon.

## robustus species group

Pseudanophthalmus undescribed species TB Sells cave ground beetle

TN: Fentress Co.: Sells Cave

G-rank: G2; This species is known from Wayne County, Kentucky south to Sells Cave, **Fentress Co.**, Tennessee (Barr email 2003).

## Pseudanophthalmus beakleyi Valentine TB Beakley's cave beetle

TN: Fentress Co.: Ace in the Hole, The Aqueduct, Copley Saltpeter Cave (Barr 1962), Cornstarch Cave, Double Entrance Sink Cave, Fallen Entrance Cave, Flag Trail Cave, Gwinn Cove Cave (Barr 1962), Manson Saltpeter Cave (Barr 1962), Mountain Eye Cave, Redbud Cave, Sand Cave, Sells Cave (Barr 1962), Shane Cave, Skillmans Mark Cave, Tater Cave (Barr 1962), Wolf River Cave (Barr 1962); Overton Co.: Baileys Webb Cave, Coleman Cave (Barr 1962), Falling Springs Cave (Barr 1962), Indian Cave, Little Slippery Slit Cave, Mill Hollow Cave, Parrott Cave (Barr 1962), Wash Lee Cave (Barr 1962); Pickett Co.: Bunkum Cave (Barr 1962), Frog Cave, Massengill Cave (Barr 1962), Pratt Cave (Barr 1962), Slippery Slit Cave

G-rank: G3/4; This species was recorded by Barr (1962) from caves in middle Tennessee counties along the edge of the Cumberland Plateau and the adjacent part of Kentucky.

## Pseudanophthalmus robustus Valentine TB Robust cave beetle

TN: Grundy Co. Coppinger Cave, Dry Cave, Tater Cave, Woodlee Cave; Overton Co.: Carr Saltpeter Cave (Barr 1962), Bear Cave (Barr 1962), Crawford Cave (Barr 1962), Mill Cave (Barr 1962), Russell Cave (Barr 1962); Putnam Co.: Ament Cave (Barr 1962), Blind Fish Cave (Barr 1962), Bridge Cave (Barr 1962), Buckner Sink Cave (Barr 1962), Calfkiller Saltpeter Cave (Barr 1962), Johnson Cave (type-locality of Barr 1962), Kuykendall Cave (Barr 1962), Mine Lick Creek Cave (Barr 1962), Wall Cave (Barr 1962); Van Buren Co.: Big Bone Cave (Barr 1962), Cagle Saltpeter Cave, Camps Gulf Cave, Cane Creek Saltpeter Cave, Glencora Spring Cave, Laurel Creek Cave, McElroy Cave (Barr 1962), Palliser Cave, Rice Cave (Barr 1962), Rumbling Falls Cave, Swamp River Cave, Swift Cave, Thunder Run Cave; Warren Co.: Hubbards Cave, Little Bat Cave, Storage Cave; White Co.: Baker Cave (Barr 1962), Blue Spring Cave (Barr 1962), Haskell Sims Cave (Barr 1962), Indian Cave (Barr 1962), Lockwood Cave, Lost Creek Cave (Barr 1962), Moore Cave (Barr 1962), Mott Cave (Barr 1962), Pollard Saltpeter Cave (Barr 1962), Quebec Cave (Barr 1962), Rockhouse Cave (Barr 1962), Selby Cave (Barr 1962), Sparkman Cave (Barr 1962), Stonehead Cave (Barr 1962), Walling Cave (Barr 1962), Ward Cave (Barr 1962), Witt Cave

G-rank: G3/4; This species was recorded by Barr (1962) from 44 caves in seven middle Tennessee counties along the edge of the Cumberland Plateau.

## Pseudanophthalmus valentinei Jeannel TB Valentine's cave beetle

TN: Overton Co.: Bilbrey Cave (Barr 1962), Copeland Saltpeter Cave (Barr 1962), Falling Springs Cave (Barr 1962), Fancher Cave (Barr 1962), Obe Lee Cave (Barr 1962), Swift Cave (Barr 1962), Three Forks Cave, Wash Lee Cave (Barr 1962), Webb Cave; Putnam Co.: Algood School Cave (Barr 1962), Blind Fish Cave (Barr 1962), Johnson Cave (type-locality of Barr 1962);

G-rank: G2; This species is sympatric with the other two species of the <u>robustus</u> group listed above (Valentine 1949, Barr 1962).

## Rhadine caudata Leconte TP ground beetle

TN: Fentress Co.: Little Jack Creek Cave, Sand Cave, Shane Cave; Grundy Co.: Coppinger Cave, Crystal Cave; Grundy Co.: Big Room Cave, Payne Saltpeter Cave,

Storage Cave, Wanamaker Cave; **Marion Co.**: Clear Spring Cave, Pryor Spring Cave; **Overton Co.**: Marie Cave, Slippery Slit Cave, Webb Cave; **Van Buren Co.**: Case Brothers Cave, McElroy Cave, Sandstone Cave; **Warren Co.**: Cumberland Caverns (Barr 1960), Joint Cave, Jaco Spring Cave, Storage Cave; **White Co.**: Indian Cave

G-rank: G4; There are only two eastern species of <u>Rhadine</u>, a predominantly western group with numerous troglobitic species in Texas (Barr 1960). <u>Rhadine caudata</u> occurs in the southeastern U.S. from Indiana south to northern Alabama, but generally does not occur in caves. The middle Tennessee area is exceptional, where it is a troglophile (Barr, email 2002). It has also been taken in the twilight zone of Mammoth Cave (Violet City entrance), Jesse Cave (Wayne Co., Ky.), Dixie Caverns (Va.), as well as in talus slopes under rocks (Barr email 2003).

### Trechus cumberlandus Barr TP Cumberland sinkhole beetle

TN: Fentress Co.: Redbud Cave, Sand Cave; Franklin Co.: Black Hole of Calcutta, Round Cove Cave; Grundy Co.: Big Mouth Cave; Overton Co.: Falling Springs Cave, Mill Hollow Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Black Hole with Water, Va-ju-de Cave; White Co.: Lost Creek Cave

G-rank: G3/4; This species was reported from 14 localities in Kentucky and Tennessee, where it occurs in caves, sinkholes and deep alcoves (Barr, 1962b; 1979b; Barr and Holsinger, 1985).

# Atranus pubescens (Dejean) TP ground beetle

TN: Warren Co.: Smith Grove Cave #1

G4; This is a common, widespread troglophilic beetle.

## Bembidion lacunarium Zimmerman TP ground beetle

TN: Fentress Co.: Fallen Entrance Cave; Grundy Co.: Big Mouth Cave;

**Overton Co.**: Falling Springs Cave

G-rank: G4; This is a common cavernicole in eastern U.S. caves. In the above caves it was found roaming detritus-rich mudbanks in the company of Pseudanophthalmus.

Bembidion sp. TX ground beetle

TN: Fentress Co.: Fallen Entrance Cave; Overton Co.: Webb Cave

Clivina sp. 1 TX ground beetle

TN: Fentress Co.: Fallen Entrance Cave

Clivina sp. 2 TX ground beetle

TN: Fentress Co.: Fallen Entrance Cave

Harpalus sp. TX ground beetle

TN: Warren Co.: Storage Cave

## Platynus tenuicollis LeConte TP ground beetle

TN: Fentress Co.: The Aqueduct, Skillmans Mark Cave; Franklin Co.: Caney Hollow Cave; Overton Co.: Falling Springs Cave, Marie Cave, Webb Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Cummings Cove Cave; White Co.: Indian Cave, Lockwood Cave

G-rank: G4; This species is a frequent troglophile in eastern U.S. caves. In the caves listed above it was found on riparian mudbanks.

# Stenolophus ochropezus Say TX ground beetle

TN: Van Buren Co.: Swamp River Cave

G-rank: G5; This species occurs across much of the United States. It typically occurs in riparian habitats in debris and is a frequent visitor in caves (Barr, email 2001).

## Tachys sp TX ground beetle

TN: Fentress Co.: Redbud Cave

## Tachyura sp. TX ground beetle

TN: Grundy Co.: Trussell Cave

### FAMILY CRYPTOPHAGIDAE

Undetermined species TX silken fungus beetle

TN: Overton Co.: Baileys Webb Cave; Van Buren Co.: Sandstone Cave

### **FAMILY LEIODIDAE**

Catops gratiosus Blanchard TP round fungus beetle

**TN:** Overton Co.: Indian Cave; Van Buren Co.: Swamp River Cave G-rank: G4; This troglophilic beetle is widespread in the eastern United States.

# <u>Dissochaetus</u> <u>oblitus</u> LeConte TP round fungus beetle

TN: Van Buren Co.: Phineas Finn Cave

G4; This species is an occasional troglophile.

### Ptomaphagus chromolithus Peck TB Paint Rock cave fungus beetle

TN: Franklin Co.: Putman Spring Cave (Peck 1984), Round Mountain Cave (Peck 1984).

G-rank: G2; This species was described by Peck (1984) from the above 2 caves and 9 caves in adjacent Jackson County, Alabama.

### Ptomaphagus fecundus Barr TB Fecund cave fungus beetle

TN: Franklin Co.: Caney Hollow Cave (Peck 1973, 1984)

G-rank: G1; This species is known only from the type-locality. It was believed extinct (Peck 1984), but was abundant during our sampling in 2004.

# Ptomaphagus hatchi Jeannel TB Hatch's cave fungus beetle

**TN:** Franklin Co.: Black Hole of Calcutta, Caroline Cove Cave (Peck 1973, 1984), Crownover Saltpeter Cave (Peck 1973, 1984), Dry Cave (Peck 1973, 1984), Keith

Cave, Mill Hollow Head Cave (Peck 1973, 1984), Putnan Spring Cave (Peck 1973, 1984), Rannie Willis Cave (Peck 1973, 1984), Round Cove Cave, Round Mountain Cave (Peck 1973, 1984), Wet Cave (Peck 1973, 1984); **Grundy Co.**: Crystal Cave (Peck 1973, 1984), Trussell Cave (Peck 1973, 1984), Wildman Cave (Peck 1973, 1984), Wonder Cave (Peck 1973, 1984); **Marion Co.**: Pryor Spring Cave, Speegle Cove Cave

G-rank: G2; These are the first records for this species from Marion County.

### **FAMILY PTILIIDAE**

Acrotrichis lucidula Rosskothen TP feather winged beetle

TN: Van Buren Co.: Swamp River Cave

G-rank: G2; These beetles were abundant in leaf litter in Swamp River Cave. This is the first record of this species in North America. It is rare in Europe and Scandinavia, where it is usually associated with mosses in high quality springs.

### FAMILY STAPHYLINIDAE

## **Subfamily Aleocharinae**

Aleochara lucifuga (Casey) TP/PS rove beetle

TN: Fentress Co.: Cornstarch Cave, Redbud Cave; Grundy Co.: Trussell Cave (Klimaszewski & Peck 1986); Van Buren Co.: Glencora Spring Cave, Upper Cummings Cove Cave

G-rank: G4; This species is known only from caves and animals burrows and has been reported from caves in the Appalachians and Interior Low Plateaus (Klimaszewski and Peck 1986). The members of this group of rove beetles have larvae that are ectoparasitoids of the pupae of flies.

Aleochara sp: TP rove beetle

TN: Franklin Co.: Caney Hollow Cave; Grundy Co.: Crystal Cave; Overton Co.: Little Slippery Slit Cave, Slippery Slit Cave

## Aloconota insecta (Thomsom) TP rove beetle

TN: Franklin Co.: Caroline Cove Cave (Klimaszewski & Peck 1986), Pitcher Ridge Cave (Klimaszewski & Peck 1986); Warren Co.: Hubbards Cave (Klimaszewski & Peck 1986)

G-rank: G4

## Aloconota laurentiana Blatchley TP rove beetle

TN: Fentress Co.: Mountain Eye Cave; Overton Co.: Falling Springs Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Swamp River Cave; White Co.: Lost Creek Cave

G-rank: G4; This species is primarily known from Europe, but has been recorded in a number of eastern North American caves (Klimaszewski and Peck, 1986).

# Aloconota diversiseta Klimaszewski TP rove beetle

TN: Van Buren Co.: Laurel Creek Cave; White Co.: Lost Creek Cave G-rank: G1; This species was previously known from three caves in Marshall and Jackson counties, Alabama (Klimaszewski and Peck, 1986).

## Atheta annexa Casey TP rove beetle

TN: Franklin Co.: Mill Hollow Cave (Klimaszewski & Peck 1986); Van Buren Co.: Laurel Creek Cave; White Co.: Indian Cave

G-rank: G4; This species is known from localities in the southeastern U.S., with most collections being in the Interior Low Plateaus (Klimaszewski and Peck, 1986).

## Atheta lucifuga Klimaszewski TP rove beetle

TN: Van Buren Co.: Laurel Creek Cave, Upper Cummings Cove Cave G-rank: G4; This species was previously known from 17 caves in the southeastern U.S. (Klimaszewski and Peck, 1986).

## Atheta troglophila Klimaszewski TP Troglophilic rove beetle

TN: Fentress Co.: Flag Trail Cave; Franklin Co.: Mill Hollow Head Cave (Klimaszewski & Peck 1986), Round Cave (Klimaszewski & Peck 1986); Grundy Co.: Trussell Cave (Klimaszewski & Peck 1986), Marion Co.: Little Cedar Mt. Indian Cave (Klimaszewski & Peck 1986), Nickajack Cave (Klimaszewski & Peck 1986), Overton Co.: Baileys Webb Cave; Pickett Co.: Frog Cave; Van Buren Co.: Glencora Spring Cave, Laurel Creek Cave, Va-ju-de Cave; White Co.: Indian Cave, Witt Cave

G-rank: G4; This species is known from Iowa to Pennsylvania, south to Florida, west to Arkansas (Klimaszewski and Peck, 1986).

## Atheta sp. TP rove beetle

TN: Cumberland Co.: Bristow Cave, Bristow Spring Cave; Grundy Co.: Crystal Cave, Payne Saltpeter Cave, Tater Cave, Woodlee Cave; Marion Co.: Cedar Ridge Crystal Cave, Clear Spring Cave, Pryor Spring Cave, Two Barrel Cave; Overton Co.: Dry Slit Cave, Little Slippery Slit Cave, Slit Shelter Cave; Rhea Co.: Marler Cave; Sequatchie Co.: Stone Cave; Van Buren Co.: Swamp River Cave

### **Subfamily Omaliinae**

Lesteva pallipes (LeConte) TP rove beetle

TN: Cumberland Co.: Baker Annex Cave; Fentress Co.: Flag Trail Cave, Hose Cave; Franklin Co.: Walker Cave; Marion Co.: Bible Spring Cave, Clear Spring Cave; Overton Co.: Cooler Cave, Little Slippery Slit Cave, Slit Shelter Cave; Rhea Co.: Marler Cave, Raymer Cave; Van Buren Co.: Glencora Spring Cave; Warren Co.: Storage Cave

G-rank: G4; This species is common in eastern U.S. caves where it sometimes congregates in large numbers in riparian gravels.

## Geodromicus brunneus (Say) TX rove beetle

**TN:** Fentress Co.: The Aqueduct; Van Buren Co.: Swamp River Cave G-rank: G4; This species is riparian and frequently associated with moss or wet leaf litter (Klimaszewski email 2003).

Brathinus nitidus LeConte TX rove beetle

TN: Fentress Co.: The Aqueduct; Overton Co.: Webb Cave

G-rank: G4

Omalium rivularae (Paykull) TX rove beetle

TN: Van Buren Co.: Swamp River Cave

G-rank: G4

## **Subfamily Paederinae**

Homeotarsus sp. TX Rove beetle

TN: Fentress Co.: Fallen Entrance Cave

<u>Lathrobium</u> sp. TX Rove beetle

TN: Fentress Co.: Fallen Entrance Cave

Paederus sp. TX rove beetle

TN: Pickett Co.: Bunkum Cave

Eustilicus sp. TX rove beetle

TN: Pickett Co.: Bunkum Cave

### **Subfamily Staphylininae**

Quedius erythrogaster Mannerheim TX rove beetle

TN: Cumberland Co.: Bristow Spring Cave; Fentress Co.: The Aqueduct, Flag Trail Cave, Little Jack Creek Cave, Mountain Eye Cave, Shane Cave; Franklin Co.: Caney Hollow Cave; Grundy Co.: Dry Cave, Payne Saltpeter Cave, Tater Cave, Wanamaker Cave, Woodlee Cave; Marion Co.: Cedar Ridge Crystal Cave, Clear Spring Cave, Excited Cow Cave, Sequatchie Cave, Skylight Cave, Two Barrel Cave, White Cricket Cave; Overton Co.: Little Slippery Slit Cave; Pickett Co.: Frog Cave; Rhea Co.: Raymer Cave; Sequatchie Co.: Stone Cave; Van Buren Co.: Upper Cummings Cove Cave, Va-ju-de Cave; White Co.: Ghost River Cave

G-rank: G5; This widespread species occurs sporadically in caves.

## Quedius sp.

TN: Cumberland Co.: Baker Annex Cave; Overton Co.: Indian Cave, Marie Cave; Van Buren Co.: Swamp River Cave; Warren Co.: Joint Cave, Hubbard's Cave North, Little Bat Cave, Storage Cave

Erichsonius sp. TX rove beetle

TN: Pickett Co.: Bunkum Cave

Gabrius sp. TX rove beetle

TN: Overton Co.: Falling Springs Cave

Philonthus sp. TX rove beetle

TN: Pickett Co.: Bunkum Cave

## Neobisnius sp. TX rove beetle

TN: Fentress Co.: Fallen Entrance Cave

### **Subfamily Pselaphinae**

Arianops undescribed species TB cave ant beetle

TN: Grundy Co.: Tater Cave

G-rank: G1; The undescribed species is known only from this single cave.

### Arianops stygica Park TB cave ant beetle

TN: Warren Co.: Cumberland Caverns (Park 1960)

G-rank: G1; The species was described from the type-locality based on a single specimen (Park 1960).

### Batriasymmodes quisnamus Park TB cave ant beetle

TN: Overton Co.: Kermit Parrott Cave (Park 1960), Little Slippery Slit Cave;

**Pickett Co.**: Bunkum Cave (Park 1960), Pratt Cave (Park 1960); **Putnam Co.**: Jared Hollow Cave (Park 1960)

G-rank: G2/3; Park (1951, 1960) listed this species from 18 caves.

## Batriasymmodes spelaeus Park TB Spelean ant beetle

TN: Marion Co.: Clear Spring Cave, Pryor Spring Cave

G-rank: G2/3; This species was described from a cave in Blount Co., Alabama and is recorded from caves in Alabama and the adjacent part of Tennessee (Chandler 1997).

## Batrisodes clypeospecus Park TB cave ant beetle

TN: Fentress Co.: Reed Creek Cave (Park 1960); Overton Co.: Upper Parrott Cave (Park 1960), Lower Parrott Cave (Park 1960)

G-rank: G1; This species is known only from these caves (Park 1960).

## Batrisodes pannosus Park TB cave ant beetle

TN: Putnam Co.: Pedigo Cave (Park 1960)

G-rank: G1; This species is known only from the type-locality (Park 1960).

### Batrisodes lineaticollis Aube TX ant beetle

TN: Grundy Co.: Big Mouth Cave

G-rank: G4; This species is widespread in the eastern U.S. and is not particularly cavernicolous (Chandler 1997).

### Batrisodes schmitti Casey TX Schmitt's ant beetle

TN: Fentress Co.: Fallen Entrance Cave

G-rank: G4; This species is distributed from Alabama/Georgia north to Ohio and Pennsylvania, and is frequently found in significant numbers in leaf litter collections (Chander email 2004).

Batrisodes sp. TB ant beetle

TN: Van Buren Co.: Cane Creek Saltpeter Cave

Batrisodes sp. TX ant beetle

TN: Fentress Co.: Skillmans Mark Cave

This collection is represented by a single female that is not one of the above species.

Batrisodes sp. TP ant beetle

TN: Van Buren Co.: Cummings Cove Cave

This record is represented by a single female (unidentifiable) specimen with prominent eyes, suggesting that it is not a troglobite (Chandler, email 2002).

Subterrochus ferus Park TB cave ant beetle

TN: Franklin Co.: Dry Cave; Grundy Co.: Trussell Cave

G-rank: G1/2; This species was described from a cave in Madison County, Alabama – these are the first Tennessee records (Chandler 1997).

Subterrochus undescribed species TB cave ant beetle

TN: Van Buren Co.: Cave Between Caves

G-rank: G1; This species is known only from this locality.

Triomelba dubia (LeConte) TX ant beetle

TN: Fentress Co.: Skillmans Mark Cave

G-rank: G4

#### ORDER LEPIDOPTERA

#### **FAMILY NOCTUIDAE**

Scoliopteryx libatrix (Linnaeus) TX Herald moth

TN: Franklin Co.: Walker Cave; Marion Co.: Bible Spring Cave, Pryor Spring Cave, Two Barrel Cave; Overton Co.: Little Slippery Slit Cave, Slit Shelter Cave

G-rank: G5; This species is commonly found over-wintering in caves. The paucity of records here is due to the fact that most of the sampling occurred prior to winter.

#### ORDER DIPTERA

### **FAMILY CULICIDAE**

<u>Culex</u> sp., probably <u>Culex</u> pipiens Linnaeus TX mosquito

**TN:** Franklin Co.: Walker Cave; Marion Co.: Clear Spring Cave, Pryor Spring Cave, Speegle Cove Cave; Van Buren Co.: Swamp River Cave, Thunder Run Cave G-rank: G5; This mosquito commonly overwinters in caves.

### **FAMILY HELEOMYZIDAE**

Aecothea specus (Aldrich) TX heleomyzid fly

TN: Fentress Co.: Cornstarch Cave, Double Entrance Sink Cave, Fallen Entrance Cave, Hose Cave, Mountain Eye Cave, Skillmans Mark Cave; Grundy Co.: Payne Saltpeter Cave, Skull Cave, Trussell Cave; Marion Co.: Bible Spring Cave; Overton Co.: Garrett's Mill Cave, Indian Cave, Mill Hollow Cave, Slit Shelter Cave; Pickett Co.: Frog Cave; Rhea Co.: Marler Cave, Raymer Cave; Sequatchie Co.: Keyhole Cave; Van Buren Co.: Glencora Spring Cave, Palliser Cave, Plantagenet Hole, Swamp River Cave, Swift Cave, Thunder Run Cave; Warren Co.: Hubbard's Cave North; White Co.: Ghost River Cave, Lost Creek Cave, Rose Cave

G-rank: G5; This and the following species commonly over-winter in caves.

## Amoebaleria defessa (Osten Sacken)TX heleomyzid fly

TN: Fentress Co.: Cornstarch Cave, Fallen Entrance Cave, Redbud Cave; Franklin Co.: Black Hole of Calcutta, Caney Hollow Cave, Dry Cave, Keith Cave, Round Cove Cave, Wet Cave; Grundy Co.: Big Mouth Cave, Crystal Cave, Tater Cave, Wanamaker Cave, Woodlee Cave; Marion Co.: Clear Spring Cave, Excited Cow Cave, Pryor Spring Cave, Sequatchie Cave, Skylight Cave, Speegle Cove Cave, Two Barrel Cave, White Cricket Cave; Overton Co.: Three Forks Cave; Rhea Co.: Marler Cave; Sequatchie Co.: Keyhole Cave, Wilmoth Cave; Van Buren Co.: Glencora Spring Cave, Laurel Creek Cave, Thunder Run Cave, Va-ju-de Cave Warren Co.: Hubbard's Cave North, Hubbard's Cave South

G-rank: G5

### FAMILY MYCETOPHILIDAE

Macrocera nobilis TP fungus gnat

TN: Coffee Co.: Welch Cave; Frankin Co.: Caney Hollow Cave; Grundy Co.: Dry Cave; Marion Co.: White Cricket Cave; Overton Co.: Little Slippery Slit Cave; Van Buren Co.: Sandstone Cave

G-rank: G4; This species is a common troglophile in caves of the eastern U.S.

#### **FAMILY PHORIDAE**

Megaselia cavernicola Brues TP cave hump-backed fly

TN: Coffee Co.: Karls Cave, Lusk Cave, Welch Cave, Welch Water Hole; Cumberland Co.: Baker Annex Cave, Baker Cave, Bristow Cave, Bristow Spring Cave; Fentress Co.: The Aqueduct, Fallen Entrance Cave, Flag Trail Cave, Little Jack Creek Cave, Mountain Eye Cave, Redbud Cave, Sand Cave, Shane Cave; Franklin Co.: Black Hole of Calcutta, Caney Hollow Cave, Crownover Saltpeter Cave, Dry Cave, Keith Cave, Round Cove Cave, Wet Cave; Grundy Co.: Big Mouth Cave, Big Room Cave, Coppinger Cave, Crystal Cave, Dry Cave, Payne Saltpeter Cave, Skull Cave, Tater Cave, Wanamaker Cave, Woodlee Cave; Marion Co.: Bible Spring Cave, Cedar Ridge Crystal Cave, Clear Spring Cave, Excited Cow Cave, Pryor Spring Cave Sequatchie Cave, Skylight Cave, Speegle Cove Cave, Two Barrel Cave, White Cricket Cave; Overton Co.:

Baileys Webb Cave, Cooler Cave, Dry Slit Cave, Falling Spring Cave, Garrett's Mill Cave, Indian Cave, Little Slippery Slit Cave, Marie Cave, Mill Hollow Cave, Slippery Slit Cave, Slit Shelter Cave, Three Forks Cave, Webb Cave; **Pickett Co.**: Bunkum Cave, Frog Cave; **Rhea Co.**: Marler Cave, Raymer Cave; **Sequatchie Co.**: Keyhole Cave, Stone Cave, Wilmoth Cave; **Van Buren Co.**: Cagle Saltpeter Cave, Camps Gulf Cave, Cane Creek Saltpeter Cave, Case Brothers Cave, Cave Between the Caves, Cummings Cove Cave, Fox Hole, Glencora Spring Cave, Laurel Creek Cave, Phineas Finn Cave, Palliser Cave, Plantagenet Hole, Rumbling Falls Cave, Sandstone Cave Swamp River Cave, Swift Cave, Thunder Run Cave, Upper Cummings Cove Cave, Va-ju-de Cave; **Warren Co.**: Joint Cave, Hubbard's Cave North, Hubbard's Cave South, Jaco Spring Cave, Little Bat Cave, Rocky River Cave, Smith Grove Cave #1, Storage Cave; **White Co.**: Ghost River Cave, Indian Cave, Lost Creek Cave, Rose Cave, Witt Cave

G-rank: G5; This species is common in caves throughout the eastern U.S. and is also known from surface collections (Borgmeier, 1965).

## FAMILY SPHAEROCERIDAE

Spelobia tenebrarum (Aldrich) TB Cave dung fly

TN: Bledsoe Co.: Aaron Tolletts Cave; Cumberland Co.: Baker Annex Cave, Baker Cave, Bristow Cave, Bristow Spring Cave; Fentress Co.: Ace in the Hole, The Aqueduct, Cornstarch Cave, Double Entrance Sink Cave, Fallen Entrance Cave, Flag Trail Cave, Little Jack Creek Cave, Mountain Eye Cave, Redbud Cave, Sand Cave, Shane Cave; Franklin Co.: Black Hole of Calcutta, Caney Hollow Cave, Dry Cave, Keith Cave, Round Cove Cave, Wet Cave; Grundy Co.: Big Mouth Cave, Big Room Cave, Coppinger Cave, Crystal Cave, Dry Cave, Payne Saltpeter Cave, Skull Cave, Tater Cave, Wanamaker Cave, Woodlee Cave; Marion Co.: Cedar Ridge Crystal Cave, Clear Spring Cave, Excited Cow Cave, Pryor Spring Cave, Sequatchie Cave, Skylight Cave, Speegle Cove Cave, White Cricket Cave; **Overton Co.**: Baileys Webb Cave, Cooler Cave, Dry Slit Cave, Falling Spring Cave, Garrett's Mill Cave, Indian Cave, Little Slippery Slit Cave, Marie Cave, Mill Hollow Cave, Three Forks Cave, Webb Cave; Pickett Co.: Bunkum Cave, Frog Cave; Rhea Co.: Marler Cave, Raymer Cave; Sequatchie Co.: Keyhole Cave, Stone Cave, Wilmoth Cave; Van Buren Co.: Cagle Saltpeter Cave, Camps Gulf Cave, Cane Creek Saltpeter Cave, Case Brothers Cave, Cave Between the Caves, Fox Hole, Glencora Spring Cave, Laurel Creek Cave, Palliser Cave, Phineas Finn Cave, Plantagenet Hole, Rumbling Falls Cave, Sandstone Cave, Swamp River Cave, Swift Cave, Thunder Run Cave, Upper Cummings Cove Cave; Warren Co.: Joint Cave, Hubbard's Cave North, Hubbard's Cave South, Hubbard's Cave West, Jaco Spring Cave, Little Bat Cave, Rocky River Cave, Smith Grove Cave #1, Storage Cave; White Co.: Indian Cave, Lost Creek Cave, Rose Cave, Witt Cave

G-rank: G5; This troglobitic fly is known from caves in 11 states in the east-central United States (Marshall, 1985). It frequently occurs on raccoon dung.

#### ORDER SIPHONAPTERA

## FAMILY CTENOPHTHALMIDAE

Stenoponia americana (Baker) PS flea

TN: Fentress Co.: Mountain Eye Cave

G-rank: G5; This species is typically associated with small rodents and in the case of this collection, the pitfall from which the fleas were found was placed near a woodrat midden.

# PHYLUM CHORDATA CLASS OSTEICHTHYES ORDER CYPRINIFORMES

### FAMILY ICTALURIDAE

<u>Ictalurus</u> sp. TX catfish

TN: White Co.: Rose Cave

#### **ORDER PERCOPSIFORMES**

### FAMILY AMBLYOPSIDAE

Typhlichthys subterraneus Girard SB Southern cavefish

TN: Fentress Co.: Xanadu Cave; Franklin Co.: Schwan Cave; Grundy Co.: Big Mouth Cave, Blue Spring southeast of Hillsboro, Crystal Cave, Wonder Cave; Marion Co.: Nickajack Cave, Winehouse Cave; Overton Co.: City Water Supply Cave #2; Putnam Co.: Bartlett Cave, Blindfish Cave; Van Buren Co.: Pennywinkle Cave, Rumbling Falls Cave, Swamp River Cave, Thunder Run Cave; Warren Co.: Artesian springs at Rock Island Dam, Jaco Spring Cave, Panter Cave; White Co.: Rose Cave

G-rank: G4; This species is known from two disjunction areas, the Ozarks in northeastern Oklahoma, northwestern Arkansas and southern Missouri; and an area within the Interior Low Plateaus from central Kentucky into Tennessee and northern Alabama (Woods and Inger, 1957). The above from the TNHD draws from numerous sources.

### FAMILY CENTRARCHIDAE

Lepomis sp. TX sunfish

TN: Marion Co.: Sequatchie Cave; White Co.: Rose Cave

#### FAMILY COTTIDAE

Cottus carolinae (Gill) TX/TP Banded sculpin

**TN: Sequatchie Co.**: Wilmoth Cave; **Van Buren Co.**: Thunder Run Cave G-rank: G5; Sculpin are common constituents of cave stream communities.

## CLASS AMPHIBIA ORDER CAUDATA

## FAMILY PLETHODONTIDAE

Gyrinophilus palleucus McCradyTB Tennessee cave salamander

TN: Franklin Co.: Custard Hollow Cave, Lost Cove Cave, Salt River Cave (TN/AL), Sinking Cove Cave; Grundy Co.: Big Mouth Cave, Crystal Cave; Marion Co.: Nickajack Cave; Warren Co.: small spring on Collins River near route 127

G-rank: G2/3; The above records are from the TN natural heritage database. Subspecies of the Tennessee cave salamander have been designated across the relatively wide range of this species, which also encompasses parts Alabama and Georgia.

# Gryinophilus porphyriticus TX Spring salamander

TN: Overton Co.: Slit Spring

G-rank: G4; This species occurs in springs and cool water habitats from New England to Alabama.

## Eurycea bislineata Green TX Two-lined salamander

**TN:** Cumberland Co.: Bristow Cave; Marion Co.: Two Barrel Cave G-rank: G4; This salamander is an occasional threshold trogloxene.

### Eurycea lucifuga Rafinesque TP Cave salamander

TN: Cumberland Co.: Baker Cave; Fentress Co.: Ace in the Hole, Double Entrance Sink Cave, Flag Trail Cave, Redbud Cave, Skillmans Mark Cave; Franklin Co.: Caney Hollow Cave, Dry Cave; Grundy Co.: Dry Cave, Tater Cave, Woodlee Cave; Marion Co.: Bible Spring Cave, Cedar Ridge Crystal Cave, Speegle Cove Cave; Overton Co.: Baileys Webb Cave, Garretts Mill Cave, Little Slippery Slit Cave, Slit Shelter Cave; Pickett Co.: Bunkum Cave, Frog Cave, cave near Bunkum Cave; Sequatchie Co.: Stone Cave; Van Buren Co.: Laurel Creek Cave, Palliser Cave, Plantagenet Hole, Swamp River Cave, Thunder Run Cave; White Co.: Ghost River Cave, Indian Cave, Lost Creek Cave, Witt Cave

G-rank: G4; This colorful salamander occurs in caves and other suitable habitats along a relatively narrow range through the east-central part of the U.S. (Minton 2001).

## Eurycea longicauda (Green) TX Long-tailed salamander

**TN:** Fentress Co.: Fallen Entrance Cave; Marion Co.: Bible Spring Cave G-rank: G4; This species occurs over much of the eastern U.S. and occasionally occurs in caves, usually near the entrance (Minton 2001).

## Plethodon dorsalis Cope TX Zig-zag salamander

TN: Coffee Co.: Karl's Cave; Fentress Co.: Ace in the Hole, The Aqueduct; Grundy Co.: Dry Cave, Payne Saltpeter Cave; Marion Co.: Pryor Spring Cave, Skylight Cave, Speegle Cove Cave, Two Barrel Cave; Overton Co.: Cooler Cave; Sequatchie Co.: Stone Cave; Van Buren Co.: Cagle Saltpeter Cave, Laurel Creek Cave, Palliser Cave, Phineas Finn Cave, Plantagenet Hole, Swift Cave; Warren Co.: Rocky River Cave; White Co.: Rose Cave

G-rank: G4; This salamander occurs in the east-central U.S., primarily in the Interior Low Plateaus and Ozarks (Minton 2001). It is an occasional threshold trogloxene.

# Plethodon glutinosus (Green) TX Slimy salamander

TN: Coffee Co.: Karl's Cave, Welch Cave; Fentress Co.: Fallen Entrance Cave, Little Jack Creek Cave, Skillmans Mark Cave; Franklin Co.: Caney Hollow Cave, Wet Cave; Grundy Co.: Big Mouth Cave, Big Room Cave, Payne Saltpeter Cave; Marion Co.: Excited Cow Cave, Skylight Cave; Overton Co.: Mill Hollow Cave; Pickett Co.: Frog Cave; Sequatchie Co.: Stone Cave; Van Buren Co.: Case Brothers Cave, Handcracker Cave, Palliser Cave, Phineas Finn Cave, Plantagenet Hole, Swift Cave; Warren Co.: Joint Cave; White Co.: Ghost River Cave

G-rank: G4; This species occurs over the eastern U.S. and frequently occurs in caves (Minton 2001).

## Pseudotriton ruber (Latreille) TX Red salamander

TN: Overton Co.: Cooler Cave

G-rank: G4; This species is frequently associated with springs and spring fed brooks.

### **ORDER SALIENTIA**

#### **FAMILY RANIDAE**

Rana catesbeiana Shaw AC Bullfrog

TN: Cumberland Co. Bristow Cave

G-rank: G5

### Rana clamitans TX/AC Green frog

TN: Franklin Co.: Stubblefield Pit; Grundy Co.: Wanamaker Cave

G-rank: G5

### Rana palustris LeConte TX Pickerel frog

TN: Fentress Co.: The Aqueduct; Grundy Co.: Big Mouth Cave; Marion Co.: Bible Spring Cave; Overton Co.: Baileys Webb Cave, Slippery Slit Cave; Van Buren Co.: Laurel Creek Cave, Plantagenet Hole, Swamp River Cave

G-rank: G5; The Pickerel frog occurs across the eastern part of the U.S., where it is a common visitor in caves (Minton 2001).

### Rana sphenocephala Cope TX Southern leopard frog

TN: Marion Co.: Pryor Spring Cave

G-rank: G5

### **FAMILY HYLIDAE**

Hyla versicolor AC Gray treefrog G5

TN: Franklin Co.: Stubblefield Pit

G-rank: G5; The presence of this treefrog at the bottom of this pit proves once again that anything can fall into a hole.

### **FAMILY BUFONIDAE**

Bufo americanus AC American toad G5

TN: Grundy Co.: Wanamaker Cave

G-rank: G5

### **CLASS REPTILIA**

### **FAMILY IGUANIDAE**

Anolis carolinensis TX Green anole

TN: Marion Co.: Cedar Ridge Crystal Cave

G-rank: G5; This species is at the northern edge of its range in Tennessee, which occurs otherwise in the coastal states of the southeastern U.S. In this cave the anoles were found running about the walls in the gate area.

### **FAMILY VIPERIDAE**

Crotalus horridus Linnaeus TX Timber rattlesnake

TN: Franklin Co.: Keith Cave

G-rank: G4; This snake was found lying on a ledge near the entrance to the cave and when scared crawled into the crawlway entrance. This species is frequently found in forested bluffs and rock outcrops and in the fall gathers at rocky areas with deep cracks and fissures (like the area around the entrance of Keith Cave).

# CLASS AVES ORDER FALCONIFORMES

## **FAMILY CATHARTIDAE**

Cathartes aura TX Turkey vulture

TN: Franklin Co.: Caney Hollow Cave

G-rank: G4; These vultures were nesting in the entrance of Caney Hollow Cave.

#### ORDER PASSERIFORMES

#### **FAMILY TYRANNIDAE**

Sayornis phoebe (Latham) TX Eastern phoebe

TN: Cumberland Co.: Bristow Cave; Fentress Co.: Double Entrance Sink Cave, Little Jack Creek Cave, Redbud Cave, Skillmans Mark Cave; Franklin Co.: Caney Hollow Cave, Dry Cave, Wet Cave; Grundy Co.: Coppinger Cave, Tater Cave; Marion Co.: Sequatchie Cave, Speegle Cove Cave, White Cricket Cave; Overton Co.: Baileys Webb Cave, Cooler Cave, Garretts Mill Cave, Webb Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Phineas Finn Cave

G-rank: G5; This bird nests in cave entrances.

### FAMILY HIRUNDINIDAE

Hirundo rustica TX Barn swallow

**TN: Overton Co.**: Three Forks Cave

G-rank: G5; These birds formerly commonly nested in cave entrances, but now have a preference for man-made structures. In Three Forks Cave the swallows were nesting in the rear of the twilight zone.

## CLASS MAMMALIA ORDER CHIROPTERA

### **FAMILY VESPERTILIONIDAE**

Eptesicus fuscus (Beauvois) TX Big brown bat

TN: Van Buren Co.: Swamp River Cave, Thunder Run Cave

G-rank: G5; This bat occurs over the entire U.S. and into southern Canada (Harvey, et al., 1999).

## Myotis grisescens Howell TX Gray bat

TN: Franklin Co.: Caney Hollow Cave; Marion Co.: Sequatchie Cave (TDNH 2000); Van Buren Co.: Laurel Creek Cave; Warren Co.: Hubbard's Cave; White Co.: Rose Cave

G-rank: G3; This species is listed as a federal endangered species. The colony in Rose Cave is well known. The Laurel Creek Cave record represents a single bat.

## Myotis lucifugus (LeConte) TX Little brown bat

TN: Fentress Co.: Little Jack Creek Cave; Overton Co.: Garretts Mill Cave, Mill Hollow Cave; Pickett Co.: Bunkum Cave

G-rank: G5; This species occurs across the U.S., where it frequents caves as well as buildings and other habitats (Barbour & Davis 1974).

### Myotis septentrionalis (Trouessart)TX Northern myotis

TN: Van Buren Co.: Palliser Cave

G-rank: G4; This species is widespread across eastern North America, where it is dependent upon caves and mines as hibernacula. It usually roosts as individuals or in small clusters.

# Myotis sodalis Miller and Allen TX Indiana bat

**TN:** Fentress Co.: Cornstarch Cave, Little Jack Creek Cave, Redbud Cave; G-rank: G2; The Indiana bat is on the federal endangered species list and is seriously declining across its range (Kurta & Kennedy 2002).

### Pipistrellus subflavus (Cuvier) TX Eastern pipistrelle

TN: Coffee Co.: Lusk Cave, Welch Cave; Fentress Co.: Shane Cave, Cornstarch Cave, Fallen Entrance Cave, Flag Trail Cave, Hose Cave, Mountain Eye Cave, Redbud Cave, Skillmans Mark Cave; Franklin Co.: Caney Hollow Cave, Wet Cave; Grundy

Co.: Big Mouth Cave, Big Room Cave, Coppinger Cave, Payne Saltpeter Cave, Skull Cave, Tater Cave; Marion Co.: Cedar Ridge Crystal Cave, Clear Spring Cave, Excited Cow Cave, Pryor Spring Cave, Sequatchie Cave (TDNH 2000), Skylight Cave, Speegle Cove Cave, White Cricket Cave; Overton Co.: Falling Springs Cave, Mill Hollow Cave; Pickett Co.: Bunkum Cave; Van Buren Co.: Camps Gulf Cave, Cummings Cove Cave, Laurel Creek Cave, Rumbling Falls Cave, Swamp River Cave, Thunder Run Cave; White Co.: Ghost River Cave, Lost Creek Cave, Rose Cave

G-rank: G5; The pipistrelle occurs across the eastern U.S. and Canada and southward into Mexico and central America (Harvey, et al., 1999).

## Corynorhinus rafinesquii TX Rafinesque's big-eared bat

TN: Fentress Co.: Little Jack Creek Cave; Grundy Co.: Coppinger Cave, Dry Cave, Woodlee Cave; Marion Co.: Skylight Cave; Pickett Co.: Bunkum Cave; Warren Co.: Joint Cave

G-rank: G3/4; This species occurs widely in the southeastern U.S., but many of the records represent only one or a few bats. Evidence indicates that this bat is declining (Nature Serve 2004).

#### ORDER RODENTIA

### **FAMILY CRICETIDAE**

Peromyscus leucopus (Rafinesque) TX White-footed mouse

TN: Fentress Co.: Flag Trail Cave; Franklin Co.: Walker Cave; Grundy Co.: Big Room Cave; Overton Co.: Baileys Webb Cave; Van Buren Co.: Swamp River Cave G-rank: G5; This mouse occurs across the eastern part of the U.S. and is a frequent visitor into caves (Barbour and Davis, 1974). Its presence was detected by scat left at cheese-baited pitfall traps in Swamp River Cave.

## Neotoma magister (Ord) TX Eastern woodrat

TN: Coffee Co.: Welch Cave, Welch Waterhole; Cumberland Co.: Baker Annex Cave, Bristow Cave; Fentress Co.: The Aqueduct, Shane Cave, Double Entrance Sink Cave, Flag Trail Cave, Little Jack Creek Cave, Mountain Eye Cave; Franklin Co.: Caney Hollow Cave, Dry Cave; Grundy Co.: Coppinger Cave, Dry Cave, Payne Saltpeter Cave, Skull Cave, Tater Cave, Woodlee Cave; Marion Co.: Excited Cow Cave, Sequatchie Cave, Skylight Cave, Speegle Cove Cave, White Cricket Cave; Overton Co.: Baileys Webb Cave, Cooler Cave, Garretts Mill Cave, Little Slippery Slit Cave, Slit Shelter Cave, Mill Hollow Cave, Webb Cave; Pickett Co.: Bunkum Cave, Frog Cave; Van Buren Co.: Antelope Cave, Cagle Saltpeter Cave, Case Brothers Cave, Cummings Cover Cave, Handcracker Cave, Palliser Cave, Phineas Finn Cave, Plantagenet Hole, Rotifer Cave, Upper Cummings Cove Cave, Va-ju-de Cave; Warren Co.: Joint Cave, Storage Cave

G-rank: G4; Most of these records were based on the presence of recent woodrat nests or latrines, although the rats were actually seen in numerous localities.

## **ORDER CARNIVORA**

## **FAMILY PROCYONIDAE**

Procyon lotor (Linnaeus) TX Raccoon

TN: Fentress Co.: Shane Cave, Mountain Eye Cave; Franklin Co.: Caney Hollow Cave; Marion Co.: Excited Cow Cave, Speegle Cove Cave, White Cricket Cave; Overton Co.: Baileys Webb Cave, Garretts Mill Cave, Little Slippery Slit Cave, Webb Cave; Pickett Co.: Bunkum Cave, Frog Cave; Van Buren Co.: Swamp River Cave G-rank: G5; The raccoon is a common visitor to caves.

### **BIOINVENTORY SITES**

### **BLEDSOE COUNTY**

### \*Aaron Tolletts Cave (BD 1)

#### Location:

**Description:** This cave was described in detail by Barr (1961). A sinkhole enters the ceiling of the cave, which extends about 150 feet in one direction and 350 feet in the other. The passage is filled in many places with formations. Stones in the small stream were covered with biofilms suggesting contamination from the septic field of the house adjacent to the cave. Holsinger (email) reported that when he visited this cave in 1967 troglomorphic crayfish were noted but not collected. None were seen during our visit in 2004.

# Species of management concern: 10

Sphalloplana percoeca cave flatworm G3

Caecidotea circulus Circular cave isopod G1

Caecidotea richardsonae Richardson's cave isopod G3

Stygobromus exilis cave amphipod G3

Cambarus hamulatus cave crayfish G2

Anthrobia mammouthia Mammoth cave sheet-web spider G3

Kleptochthonius charon cave pseudoscorpion G1

Arrhopalites undescribed species Aaron Tolletts caves springtail G1

Pseudosinella hirsute Hirsute cave springtail G3

Pseudanophthalmus undescribed species Aaron Tolletts cave beetle G1

### Obligate subterranean species: 12

Sphalloplana percoeca cave flatworm G3

Caecidotea circulus Circular cave isopod G1

Caecidotea richardsonae Richardson's cave isopod G3

Crangonyx antennatus Appalachian cave amphipod G4

Stygobromus exilis cave amphipod G3

Cambarus hamulatus cave crayfish G2

Anthrobia mammouthia Mammoth cave sheet-web spider G3

Kleptochthonius charon cave pseudoscorpion G1

Arrhopalites undescribed species Aaron Tolletts caves springtail G1

Pseudosinella hirsute Hirsute cave springtail G3

Pseudanophthalmus undescribed species Aaron Tolletts cave beetle G1

Spelobia tenebrarum Cave dung fly G5

Vertebrates: 0

#### COFFEE COUNTY

## \*Karls Cave (CF 24)

#### Location:

**Description:** This cave is a swallowhole adjacent to the spring stream flowing out of Lusk Cave. It appears to take floodwater overflow from the spring stream and has about 100 feet of crawlway passage

## Species of management concern: 0

### **Obligate subterranean species:**

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 1

# \*Lusk Cave (CF 8)

### **Location:**

**Description:** This cavewas described by Barr (1961). The entrance passage has deep water and flood conditions defeated attempts to enter the cave for any significant distance.

## **Species of management concern: 2**

<u>Carychium stygium</u> Stygian carych G3 <u>Phalangodes appalachius</u> Appalachian cave harvestman G2

## Obligate subterranean species: 2

<u>Carychium stygium</u> Stygian carych G3 Phalangodes appalachius Appalachian cave harvestman G2

#### Vertebrates: 3

<u>Plethodon dorsalis</u> Zig-zag salamander G4 <u>Plethodon glutinosis</u> Slimy salamander G4 Pipistrellus subflavus Eastern pipistrelle G5

## \*Welch Cave (CF 60)

### **Location:**

**Description:** This cave is in a cliff near the top of a wet-weather swallet - the cave appears to be an upstream continuation of Lusk Cave. It is entered by an upper level breakdown room with many formations and rimstone pools, with access to the lower stream passage.

## **Species of management concern: 3**

<u>Sphalloplana</u> <u>percoeca</u> cave flatworm G3 Stygobromus undescribed species Davis cave amphipod G3

## Litocampa valentinei Valentines cave dipluran G3

## Obligate subterranean species: 6

Sphalloplana percoeca cave flatworm G3
Stygobromus undescribed species Davis cave amphipod G3
Caecidotea sp., probably C. bicrenata cave isopod G4
Phanetta subterranea Subterranean sheet-web spider G5
Litocampa valentinei Valentines cave dipluran G3
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 3**

<u>Plethodon glutinosis</u> Slimy salamander G4 <u>Neotoma magister</u> Eastern woodrat G4 Pipistrellus subflavus Eastern pipistrelle G5

## \*Welch Water Hole

### **Location:**

**Description:** This cave is near the bottom of a cliff near a wet-weather swallet (the base of the cliff containing Welch Cave). Entered via a stair-step climbdown, a short section of small stream that is perhaps tributary to Lusk Cave is present.

## **Species of management concern: 1**

Orconectes australis Southern cave crayfish G3

## Obligate subterranean species: 2

<u>Caecidotea</u> sp., probably <u>C. bicrenata</u> cave isopod G4 <u>Orconectes</u> <u>australis</u> Southern cave crayfish G3

### Vertebrates: 1

Neotoma magister Eastern woodrat G4

#### CUMBERLAND COUNTY

### \*Baker Cave (CD 1)

#### **Location:**

**Description:** This cave was described by Barr (1961). It consists of a stream passage that is about 525 feet in length. Initially a walking height passage, the last 250 feet is a crawlway.

## **Species of management concern: 5**

<u>Pseudotremia</u> undescribed species G1
<u>Litocampa cookei</u> Cooke's cave dipluran G3
<u>Arrhopalites</u> undescribed species Baker cave springtail G1
Pseudosinella pecki Peck's cave springtail G2

## Pseudanophthalmus undescribed species Baker cave beetle G1

## Obligate subterranean species: 6

Pseudotremia undescribed species G1
Litocampa cookei Cooke's cave dipluran G3
Arrhopalites undescribed species Baker cave springtail G1
Pseudosinella pecki Peck's cave springtail G2
Pseudanophthalmus undescribed species Baker cave beetle G1
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 2**

<u>Eurycea lucifuga</u> Cave salamander G4 <u>Procyon lotor</u> Raccoon G5

### \*Baker Annex Cave

### Location:

**Description:** This cave is in the karst window south of Baker Cave described by Barr (1961). A walking height entrance leads to a breakdown – removing rock allowed access into a small, extremely unstable (dangerous) sandstone breakdown room.

# Species of management concern: 2

<u>Helicodiscus</u> <u>barri</u> Barr's terrestrial snail G3 <u>Pseudotremia</u> undescribed species G1

## Obligate subterranean species: 3

<u>Helicodiscus barri</u> Barr's terrestrial snail G3 <u>Pseudotremia</u> undescribed species G1 <u>Spelobia tenebrarum</u> Cave dung fly G5

#### Vertebrates: 2

Neotoma magister Eastern woodrat G4 Procyon lotor Raccoon G5

## \*Bristow Cave (CD 4)

#### Location:

**Description:** This cave was described in detail by Barr (1961). It occurs in Grassy Cove and consists of essentially a single 300 foot long room with a stream running along the wall. The location marked on the Grassy Cove quadrangle map for Bristow Cave is incorrect (see below). A typographical error in Barr (1961) indicated the cave at W85 degrees (actually W84).

# **Species of management concern: 3**

<u>Pseudosinella pecki</u> Peck's cave springtail G2 Litocampa cookei Cooke's cave dipluran G3

# Litocampa undescribed species cave dipluran G2

# Obligate subterranean species: 5

Phanetta subterranea Subterranean sheet-web spider G5
Pseudosinella pecki Peck's cave springtail G2
Litocampa cookei Cooke's cave dipluran G3
Litocampa undescribed species cave dipluran G2
Spelobia tenebrarum Cave dung fly G5

### Vertebrates: 4

Rana catesbeiana Bull frog G5
Eurycea bislineata Two-lined salamander
Neotoma magister Eastern woodrat G4
Sayornis phoebe Eastern Phoebe G5

# \*Bristow Spring Cave (CD 42)

### Location

**Description:** This is the site described by Barr (1961) as the place where the stream from Bristow cave emerges. The cave consists of a hands-and-knees crawlway adjacent to the stream. The location marked on the Grassy Cove quadrangle map as Bristow Cave is actually this cave – Bristow Cave is actually on the hillside to the east of where the cave is marked on the topographic map.

# **Species of management concern: 2**

<u>Pseudosinella pecki</u> Pecks cave springtail G2 Litocampa cookei Cooke's cave dipluran G3

# Obligate subterranean species: 3

<u>Pseudosinella pecki</u> Pecks cave springtail G2 <u>Litocampa cookei</u> Cooke's cave dipluran G3 Spelobia tenebrarum Cave dung fly G5

Vertebrates: 0

### **FENTRESS COUNTY**

## Ace in the Hole (FE 476)

#### **Location:**

**Description:** A crawlway entrance leads to a total of 149 feet of passage with residual pools.

### Species of management concern: 1

Pseudanophthalmus undescribed sp. Cumberlandus Group cave beetle G1

# Obligate subterranean species: 4

<u>Caecidotea stygia</u> Northern cave isopod G4

<u>Pseudanophthalmus</u> undescribed sp. <u>Cumberlandus</u> Group cave beetle G1

<u>Pseudanophthalmus</u> <u>beakleyi</u> North Cumberland cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 2

<u>Eurycea lucifuga</u> Cave salamander G4 <u>Plethodon dorsalis</u> Zig-zag salamander G4

# **Alastor Resurgence Cave (FE 477)**

#### Location:

**Description:** This spring cave has a separate spring run that merges with Jim Creek along its west bank. This cave, the downstream resurgence of Alastor Cave (FE 406), is essentially a water filled passage with little terrestrial habitat other than the walls and ceiling. It is approximately 400 feet in length and sumps at the end.

# Species of management concern: 1

Liocranoides sp. two-clawed spider G3

Obligate subterranean species: 0

Vertebrates: 0

## The Aqueduct (FE 510)

### **Location:**

**Description:** Located in a five foot outcrop on the west side of Jim Creek, the cave is approximately 2900 feet NNE of the confluence of Jim and Bud creeks. A 35 foot crawlway leads to a T-intersection with both passages containing residual pools. The cave has 198 feet of passage. Pitfalls were placed in riparian mudbanks, a residual pool was sampled for plankton and leaf litter and detritus were taken for Berlese extraction.

## **Species of management concern: 1**

Pseudotremia undescribed species 4 Garland's cave milliped G1

### Obligate subterranean species: 3

<u>Pseudotremia</u> undescribed species 4 Garland's cave milliped G1 <u>Pseudanopthalmus</u> <u>beakleyi</u> North Cumberland cave beetle G3/4 <u>Spelobia tenebrarum</u> Cave dung fly G5

#### **Vertebrates:**

<u>Plethodon dorsalis</u> Zig-zag salamander G4 <u>Rana palustris</u> Pickerel frog G5

# **Cornstarch Cave (FE 411)**

### **Location:**

**Description:** The prominent shelter entrance, 25 feet wide by 10 feet high, is about 30 feet east of Jim Creek. Cornstarch Cave is typified by large, dry, sandy trunk passages. In the part of the cave sampled, a crawlway leading from the main entrance allowed access to a large trunk passage. Aquatic habitat on the day of our visit (13 September 2003) included residual pools and a tiny stream in an upper level. A plankton sample was taken from the main stream residual pools and the upper level pool was sampled by hand

The cave was noticeably cold and a strong wind blows through the entrance crawlway, but lessens in the larger main stream passage. The terrestrial habitat of the cave included alternating areas of breakdown and riparian mud banks with embedded and surface detritus layers. An upper level passage was sampled that contained a few speleothems with expanses of dry mud banks and breakdown. Baited pitfall traps were placed starting in the main stream passage. A line of pitfalls were placed in riparian mudbanks and continued into the upper level passage. A sample of stranded stream detritus was taken for Berlese extraction. Rocks in the stream contained biofilms and filamentious microbial growths in the interstices of the cobbles, but no invertebrates were found. The findings in the stream suggested de-oxygenation of the habitat due to decomposition of the significant quantities of organic material present.

# Species of management concern: 7

Stygobromus exilis amphipod crustacean G3
Orconectes australis australis Southern cave crayfish G3
Scoterpes copei Cope's cave milliped G3
Pseudosinella orba Cave springtail G2
Litocampa cookei Cook's cave dipluran G3
Nelsonites walteri Southern long-horned cave beetle
Myotis sodalis Indiana bat G2

## Obligate subterranean species: 11

Caecidotea stygia Northern cave isopod G4
Stygobromus exilis amphipod crustacean G3
Orconectes australis australis Southern cave crayfish G3
Hesperochernes mirabilis Eastern cave pseudoscorpion G4
Phanetta subterranea Subterranean sheet-web spider G5
Scoterpes copei Cave milliped G3
Pseudosinella orba Cave springtail G2
Litocampa cookei Cook's cave dipluran G3
Nelsonites walteri Southern long-horned cave beetle
Pseudanopthalmus beakleyi North Cumberland cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Myotis sodalis Indiana bat (Endangered species) G2

# Flag Trail Cave (FE 530)

#### Location:

**Description:** This short cave is located along a side ravine on the west bank of Jim Creek. It is a short section of streamless canyon passage.

## **Species of management concern: 3**

<u>Pseudotremia</u> undescribed species 4 Garland's cave milliped G1 <u>Liocranoides</u> sp. two-clawed spider G3 Anillinus undescribed species – Undescribed ground beetle G1

# Obligate subterranean species: 5

Phanetta subterranea Subterranean sheet-web spider G5
Pseudotremia undescribed species 4 Garland's cave milliped G1
Anillinus undescribed species – Undescribed ground beetle G1
Pseudanopthalmus beakleyi North Cumberland cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 2**

<u>Eurycea lucifuga</u> Cave salamander G4 Neotoma magister Eastern woodrat G4

# Hose Cave (FE 531)

#### Location:

**Description:** This cave is found on the bank of Jim Creek in a small rock outcrop. A spring channel connects the cave entrance and the creek.

This is a short crawlway cave. The water emerging from the entrance comes from ceiling drips immediately inside the cave, rather than from a cave stream. Continuing into the cave the passage was dry (13 September 2003) until residual pools were encountered.

# Species of management concern: 1

Pseudotremia undescribed species 4 Garland's cave milliped G1 (probable identification)

### Obligate subterranean species: 1

<u>Pseudotremia</u> undescribed species 4 Garland's cave milliped G1 (probable identification)

#### Vertebrates: 1

Pipistrellus subflavus Eastern pipistrelle

# Little Jack Creek Cave (FE 85)

#### Location:

**Description:** This cave lies a short distance from the south bank of Little Jack Creek, about 1000 feet SSW of the confluence of Jim and Bud creeks.

The walking height entrance allows access to a joint-controlled maze with about 650 of passage. A crawlway with another 150 feet of passage not examined contains a small stream that presumably flows to the spring near the entrance of the cave. Significant nutrient enrichment near the entrance has been afforded by woodrat latrines and other materials.

## **Species of management concern: 3**

<u>Pseudotremia</u> undescribed species 4 Garland's cave milliped G1 <u>Liocranoides</u> sp. two-clawed spider G3 Myotis sodalis Indiana bat G2

# Obligate subterranean species: 5

Miktoniscus barri Barr's terrestrial isopod G3/4

<u>Pseudotremia</u> undescribed species 4 Garland's cave milliped G1

<u>Phanetta subterranea</u> Subterranean sheet-web spider G5

<u>Hesperochernes mirabilis</u> Southeastern cave pseudoscorpion G4

<u>Spelobia tenebrarum</u> Cave dung fly G5

### **Vertebrates: 6**

Plethodon glutinosus Slimy salamander G4
Myotis lucifugus Little brown bat G4
Myotis sodalis Indiana bat G2
Corynorhinus rafinesquii Rafinesque's big-eared bat G3/4
Neotoma magister Eastern woodrat G4
Sayornis phoebe Eastern Phoebe G5

### Redbud Cave (FE 421)

# Location:

**Description:** This cave is on the south bank of Little Jack Creek Creek about 800 feet south and slightly east of the confluence of Jim and Bud creeks. The entrance is about 40 vertical feet above Little Jack Creek. The main entrance is about 5 feet high and 30 feet wide. After climbing down the entrance slope an overflow cave stream spanned by rimstone dams was encountered. At the time of our visit (14 September 2003) there appeared to be little flow. Adjacent to the stream was a flowstone mound with numerous rimstone pools. Continuing down the passage the cave presented three levels. In the lower level the walls and floor of the cave were blackened by mineralization. The habitat consisted of cobbles and mudbanks with a large rimstone dam with a relatively deep pool spanning the passage at the end of our point of sampling. A mid-level passage consisted

of a high canyon with stream cobbles, mud and sand banks, and scattered detritus. A ledge high above the floor of the canyon leads to a series of dry, sandy crawlways.

A total of 5109 feet of passage have been mapped and the cave is hydrologically connected to Little Jack Creek Cave.

# Species of management concern: 11

Mesodon wetherbyi Wetherby's terrestrial snail G2

Triodopsis complanata terrestrial snail G2

Diacyclops indianensis Indiana groundwater copepod G2

Stygobromus exilis amphipod crustacean G3

Orconectes australis australis Southern cave crayfish G3

Pseudotremia undescribed species 4 Garland's cave milliped G1

Callioplus pantoplus amaurobiid spider G3

Scoterpes copei Cope's cave milliped G3

Ptenothrix quadrangularis springtail G1

Litocampa cookei Cook's cave dipluran G3

Myotis sodalis Indiana bat G2

# Obligate subterranean species: 12

Diacyclops indianensis Indiana groundwater copepod G2

Caecidotea stygia Northern cave isopod G4

Miktoniscus barri Barr's terrestrial isopod G3/4

Stygobromus exilis amphipod crustacean G3

Orconectes australis australis Southern cave crayfish G3

Phanetta subterranea Subterranean sheet-web spider G5

Pseudotremia undescribed species 4 Garland's cave milliped G1

Scoterpes copei Cope's cave milliped G3

Sinella cavernarum Cavernicolous springtail G4

Litocampa cookei Cook's cave dipluran G3

Pseudanopthalmus beakleyi North Cumberland cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 3

Eurycea <u>lucifuga</u> Cave salamander G4

Myotis sodalis Indiana bat G2

Sayornis phoebe Eastern Phoebe G5

### Sand Cave (FE 505)

#### **Location:**

**Description:** This cave is on the west bank of Jim Creek directly across from the main entrance of Cornstarch Cave, about 3200 feet north of the confluence of Jim Creek and Bud Creek. A 2 foot wide by 1.5 foot high entrance allows access to a dry sandy crawlway. Although 149 feet of passages have been mapped, only about 50 feet of this was enterable on the day of our visit without digging through sand banks.

# Species of management concern: 0

# Obligate subterranean species:

<u>Phanetta subterranea</u> Subterranean sheet-web spider G5 <u>Pseudanophthalmus beakleyi</u> North Cumberland cave beetle G3/4 <u>Spelobia tenebrarum</u> Cave dung fly G5

Vertebrates: 0

### Cave near Green Bottle Cave

#### Location:

**Description:** This site was found while searching for Green Bottle Cave and lies in the approximate location for that cave in the TCS database. One walk-in entrance in the back of a shelter bluff led to a short canyon passage decorated by flowstone along the walls. An adjacent tight fissure contained a tight, questionably enterable passage. It is unknown if either of these passages is Green Bottle Cave, although considering the proximity of these caves to the TCS location, if they are not the cave they are presumably geologically related to it.

Species of management concern: 0

Obligate subterranean species: 0

Vertebrates: 0

## **Mountain Eye Cave (FE 116)**

## **Location:**

**Description:** The Mountain Eye Cave System is the fifth longest in Tennessee at about 17 miles in surveyed length. The Lott Dean Entrance is found at the base of the cliff. Two entrances are present, a spring at the coordinates below and a dry entrance, which is about 40 feet above and 60 feet upstream of the spring. A diverse assemblage of habitats was sampled in the part of the cave accessible from the Lott Dean Entrance.

# **Species of management concern: 4**

Orconectes australis australis Southern cave crayfish G3

Pseudotremia sp. Cave milliped G1

Litocampa undescribed species 3 undescribed cave dipluran G1

Nelsonites walteri Southern long-horned cave beetle G2

### **Obligate subterranean species: 8**

<u>Caecidotea stygia</u> Northern cave isopod G5 <u>Orconectes australis australis</u> Southern cave crayfish G3 Pseudotremia sp. Cave milliped G1 <u>Phanetta subterranea</u> Subterranean sheet-web spider G5
<u>Litocampa</u> undescribed species 3 undescribed cave dipluran G1
<u>Pseudanophthalmus beakleyi</u> North Cumberland cave beetle G3/4
<u>Nelsonites walteri</u> Southern long-horned cave beetle G2
<u>Spelobia tenebrarum</u> Cave dung fly G5

#### Vertebrates: 3

Neotoma magister Eastern woodrat G4

<u>Procyon lotor</u> Raccoon G5

Pipistrellus subflavus Eastern pipistrelle bat G5

## Shane Cave (FE 23)

## **Location:**

**Description:** This cave lies next to a dirt road and receives the flow of a sinking stream. The part of this cave that was examined consisted of a walking height stream canyon. Stream gravels were sampled by washing and pitfalls were placed in riparian mudbanks. A dry upper level with numerous active woodrat nests lies beyond the stream canyon. Pitfalls were placed adjacent to woodrat debris and latrines and a sample of rat litter was taken for Berlese extraction. A crawlway passage was followed adjacent to the upper level that led into what appeared to be a flood overflow route with a few residual pools. Pitfalls were placed in damp mudbanks there.

# Species of management concern: 5

Glyphalinia undescribed species Undescribed glyph snail G1
<u>Liocranoides</u> sp. Two-clawed spider G3
<u>Pseudotremia</u> undescribed species 3 Roebucks' cave milliped G1
<u>Scoterpes copei</u> Cope's cave milliped G3
<u>Litocampa</u> undescribed species 1 undescribed cave dipluran G1

### Obligate subterranean species: 7

Phanetta subterranea Subterranean sheet-web spider G5

Hesperochernes mirabilis Eastern cave pseudoscorpion G4

Scoterpes sp., probably S. copei Cope's cave milliped G3

Pseudotremia undescribed species 3 Roebucks' cave milliped G1

Litocampa undescribed species 1 undescribed cave dipluran G1

Pseudanophthalmus beakleyi North Cumberland cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 3

Neotoma magister Eastern woodrat G4
Procyon lotor Raccoon G5
Pipistrellus subflavus Eastern pipistrelle bat G5

### **Double Entrance Sink Cave (FE 19)**

#### Location:

**Description:** This cave lies in a cliff above Buffalo Cove Creek. Two adjacent entrances rejoin in a breakdown strewn room with large mudbanks in which pitfalls were placed and a leaf litter sample was taken for Berlese extraction. A narrow canyon drain led away from the room. A total of 130 feet of passage is reported for this cave.

## **Species of management concern: 0**

# Obligate subterranean species: 3

<u>Phanetta subterranea</u> Subterranean sheet-web spider G5
<u>Pseudanophthalmus</u> <u>beakleyi</u> North Cumberland cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 3**

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Neotoma magister</u> Eastern woodrat G4 Sayornis phoebe Eastern Phoebe G5

## **Fallen Entrance Cave (FE 20)**

#### **Location:**

**Description:** This cave lies on the valley floor adjacent to the road leading to the abandoned restaurant and lodge. Three areas were examined in this cave. The first was a wide crawlway leading from the intermittent sinking stream entrance. This passage intersected a large passage containing high, detritus rich mudbanks and a dome with a small waterfall contributing water. Pitfalls were placed in the mudbanks, stream gravels below the waterfall were washed and a litter sample was taken for Berlese extraction. An upper level can be accessed by climbing a central mudbank (that was teeming with beetles) and then climbing up a notch in the cave wall. The upper level contained residual pools inhabited by cave crayfish Orconectes australis along all of the part that was examined. Pitfalls were placed in riparian mudbanks along this passage.

# **Species of management concern: 3**

Orconectes <u>australis</u> <u>australis</u> Southern cave crayfish G3

<u>Pseudotremia</u> undescribed species 3 Roebucks' cave milliped G1

<u>Litocampa</u> undescribed species 1 undescribed cave dipluran G1

# Obligate subterranean species: 6

<u>Caecidotea stygia</u> Northern cave isopod G5

<u>Orconectes australis australis</u> Southern cave crayfish G3

<u>Pseudotremia</u> undescribed species 3 Roebucks' cave milliped G1

<u>Litocampa</u> undescribed species 1 undescribed cave dipluran G1

<u>Pseudanophthalmus beakleyi</u> North Cumberland cave beetle G3/4

<u>Spelobia tenebrarum</u> Cave dung fly G5

#### Vertebrates: 3

<u>Plethodon glutinosus</u> Slimy salamander G4 <u>Eurycea longicauda</u> Long-tailed salamander <u>Pipistrellus subflavus</u> Eastern pipistrelle bat G5

## **Skillmans Mark Cave (FE 528)**

#### Location:

**Description:** This cave lies on the bank of Buffalo Cove Creek near an abandoned restaurant and lodge. Shortly inside the entrance is a dome with a small waterfall – a metal water tank has been placed under the dome. The water flows down a rocky stream and enters a drain passage that was followed to a point where it became too small for human entry. A plankton net was placed in the stream to collect specimens drifting from stirring the substrate. Riparian detritus was taken for Berlese extraction and baited pitfalls were placed in riparian mudbanks.

# Species of management concern: 5

Sphalloplana percoeca cave flatworm G2
Stenotrema angellum terrestrial snail G3
Appaleptoneta sp. leptonetid spider G1
Pseudotremia undescribed species 3 Roebucks' cave milliped G1
Litocampa undescribed species 1 undescribed cave dipluran G1

# Obligate subterranean species: 8

Sphalloplana percoeca cave flatworm G2
Caecidotea stygia Northern cave isopod G5
Miktoniscus barri Barr's terrestrial isopod G3/4
Appaleptoneta sp. leptonetid spider G1
Pseudotremia undescribed species 3 Roebucks' cave milliped G1
Litocampa undescribed species 1 undescribed cave dipluran G1
Pseudanophthalmus beakleyi North Cumberland cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates:**

<u>Plethodon glutinosus</u> Slimy salamander G4 <u>Eurycea lucifuga</u> Cave salamander <u>Pipistrellus subflavus</u> Eastern pipistrelle bat G <u>Sayornis phoebe</u> Eastern Phoebe G5

#### FRANKLIN COUNTY

## \*Caney Hollow Cave (FR 2)

# **Location:**

**Description:** This cave was described by Barr (1961). The cave has three entrances – the owner reported riding a horse between the larger two. The main passage extends about

1200 feet to a room used by Gray bats in the summer. A stream can be accessed by climbing down a steep mudbank near the end of the main passage.

# **Species of management concern: 7**

Stygobromus exilis cave amphipod G3

Scoterpes undescribed species cave milliped G2

Porrhomma cavernicola Cavernicolous sheet-web spider G3

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa valentinei Valentines cave dipluran G3

Pseudanophthalmus undescribed species Caney Hollow cave beetle G1

Ptomaphagus fecundus Fecund cave fungus beetle G1

# Obligate subterranean species: 11

Stygobromus exilis cave amphipod G3

Porrhomma cavernicola Cavernicolous sheet-web spider G3

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes undescribed species cave milliped G2

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa valentinei Valentines cave dipluran G3

Pseudanophthalmus undescribed species Caney Hollow cave beetle G1

Ptomaphagus fecundus Fecund cave fungus beetle G1

Spelobia tenebrarum Cave dung fly G5

### Vertebrates: 8

Eurycea <u>lucifuga</u> Cave salamander G4

<u>Plethodon glutinosis</u> Slimy salamander G4

<u>Neotoma magister</u> Eastern woodrat G4

<u>Pipistrellus subflavus</u> Eastern pipistrelle G5

<u>Myotis grisescens</u> Gray bat G3

<u>Procyon lotor</u> Raccoon G5

<u>Cathartes aura</u> Turkey vulture G5

Sayornis phoebe Eastern phoebe G5

## \*Dry Cave (FR 9)

### **Location:**

**Description:** This cave was described by Barr (1961). It consists of a single large room about 250 long and as much as 40 feet high. The cave has many formations and massive flowstone. The only aquatic habitat in the cave consists of rimstone pools, but in wet weather a stream flows down the mountainside and sinks in a hole in front of the cave entrance.

### **Species of management concern: 12**

Sphalloplana percoeca cave flatworm G3
Stygobromus undescribed species Davis cave amphipod G3
Kleptochthonius tantalus Dry cave pseudoscorpion G1

Kleptochthonius magnus cave pseudoscorpion G1

Scoterpes sp. cave milliped G3

Pseudotremia barri Barr's cave millipede G2

Pseudosinella pecki Peck's cave springtail G2

Litocampa valentinei Valentines cave dipluran G3

Pseudanophthalmus humeralis cave beetle G1

Pseudanophthalmus intermedius Intermediate cave beetle G2

Ptomaphagus hatchi Hatch's cave beetle G3

Subterrochus ferus cave ant beetle G3

# Obligate subterranean species: 14

Sphalloplana percoeca cave flatworm G3

Caecidotea bicrenata Two-toothed cave isopod G4

Stygobromus undescribed species Davis cave amphipod G3

Phanetta subterranea Subterranean sheet-web spider G5

Kleptochthonius tantalus Dry cave pseudoscorpion G1

Scoterpes sp. cave milliped G3

Pseudotremia barri Barr's cave millipede G2

Pseudosinella pecki Peck's cave springtail G2

Litocampa valentinei Valentines cave dipluran G3

Pseudanophthalmus humeralis cave beetle G1

Pseudanophthalmus intermedius Intermediate cave beetle G2

Ptomaphagus hatchi Hatch's cave beetle G3

Subterrochus ferus cave ant beetle G3

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 5

Eurycea <u>lucifuga</u> Cave salamander G4
<u>Plethodon dorsalis</u> Zig-zag salamander G4
<u>Neotoma magister</u> Eastern woodrat G4
Bat spp. (on ceiling)
Sayornis phoebe Eastern phoebe G5

## \*Wet Cave (FR 30)

### **Location:**

**Description:** Over 4000 feet of this cave was described by Barr (1961). Subsequent to Barr's description another passage containing a series of pits leading from a second entrance was also connected to Wet Cave. The main part of the cave is comprised of a large walking height stream passage.

### Species of management concern: 5

Orconectes <u>australis</u> Southern cave crayfish G3

<u>Nesticus barri</u> Barr's cave spider G3

<u>Pseudotremia barri</u> Barr's cave milliped G2

<u>Litocampa cookei</u> Cooke's cave dipluran G3 Ptomaphagus hatchi Hatch's cave fungus beetle G3

# Obligate subterranean species: 8

Caecidotea bicrenata Two-toothed cave isopod G4
Orconectes australis Southern cave crayfish G3
Phanetta subterranea Subterranean sheet-web spider G5
Nesticus barri Barr's cave spider G3
Pseudotremia barri Barr's cave milliped G2
Litocampa cookei Cooke's cave dipluran G3
Ptomaphagus hatchi Hatch's cave fungus beetle G3
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 4

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Plethodon glutinosis</u> Slimy salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Sayornis phoebe</u> Eastern phoebe G5

# \*Keith Cave (FR 9)

### Location:

**Description:** This cave was described by Barr (1961) as one of the most beautiful caves in Tennessee. Essentially one large room, the cave can be entered by a small entrance in a sinkhole or through a pit that forms a skylight. Many mud-bottomed pools were found at the base of the room. It should be noted that a rattlesnake was found in the entrance to the cave.

# **Species of management concern: 10**

Carychium stygium Stygian carych G3

Stygobromus vitreous cave amphipod G3

Nesticus barri Barr's cave spider G3

Tetracion jonesi Jone's cave milliped G3

Scoterpes undescribed species cave milliped G2

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa valentinei Valentines cave dipluran G3

Podocampa undescribed species Undescribed edaphic dipluran G1

Anillilinus species ground beetle G1

Ptomaphagus hatchi Hatch's cave fungus beetle

### Obligate subterranean species: 10

Carychium stygium Stygian carych G3
Stygobromus vitreus cave amphipod G3
Nesticus barri Barr's cave spider G3
Tetracion jonesi Jone's cave milliped G3
Scoterpes undescribed species cave milliped G2

Pseudosinella christianseni Christiansen's cave springtail G3
Litocampa valentinei Valentines cave dipluran G3
Ptomaphagus hatchi Hatch's cave fungus beetle G3
Anillilinus species ground beetle G1
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 5

Eurycea <u>lucifuga</u> Cave salamander G4

<u>Plethodon dorsalis</u> Zigzag salamander G4

<u>Plethodon glutinosis</u> Slimy salamander G4

<u>Crotalus horridus</u> Timber rattlesnake

Pipistrellus subflavus Eastern pipistrelle G5

# \*Walker Cave

#### Location

**Description:** This cave was described by Barr (1961) as another cave near Caney Hollow Cave. The cave was described as having an entrance 10 feet high by 60 feet wide. A climb at the rear of the shelter entrance leads up into a room at the contact of the Chattanooga Shale. A small seep spring was present near the entrance.

# **Species of management concern: 1**

Sphalloplana percoeca cave flatworm G3

# Obligate subterranean species: 3

Sphalloplana percoeca cave flatworm G3
Phanetta subterranea Subterranean sheet-web spider G5
Spelobia tenebrarum Cave dung fly G5

### Vertebrates: 2

<u>Sayornis phoebe</u> Eastern phoebe G5 <u>Peromyscus leucopus</u> White-footed mouse G5

## \*Crownover Saltpeter Cave (FR 6)

# **Location:**

**Description:** This cave was described by Schindel & Hickman (1998) and contains over 14,000 feet of passage, mostly a dry borehole passage that was mined for saltpeter.

# **Species of management concern: 3**

<u>Diacyclops indianensis</u> Indiana groundwater copepod G2 <u>Litocampa</u> undescribed species 4 undescribed cave dipluran G3 <u>Nesticus barri</u> Barr's cave spider G3

### Obligate subterranean species: 5

<u>Diacyclops indianensis</u> Indiana groundwater copepod G2

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4
<u>Nesticus barri</u> Barr's cave spider G3
<u>Litocampa</u> undescribed species 4 undescribed cave dipluran G3
<u>Spelobia tenebrarum</u> Cave dung fly G5

### Vertebrates: 5

Eurycea lucifuga Cave salamander G4
Plethodon dorsalis Zigzag salamander G4
Plethodon glutinosis Slimy salamander G4
Pipistrellus subflavus Eastern pipistrelle G5
Corynorhinus rafinesquii Rafinesque's big-eared bat G3/4

# \*Little Crow Creek Cave (FR 15)

#### Location:

**Description:** This cave was described by Matthews (1971). From the 40 foot wide by 15 foot high entrance the passage continues for approximately 850 feet as mostly wide and walking height. The cave is a storm-water overflow route with a siphon that flows in wet weather

# **Species of management concern: 3**

<u>Diacyclops indianensis</u> Indiana groundwater copepod G2 <u>Stygobromus</u> undescribed species 4 Southern cave amphipod G3 <u>Nesticus barri</u> Barr's cave spider G3

# Obligate subterranean species: 5

<u>Diacyclops indianensis</u> Indiana groundwater copepod G2
<u>Caecidotea bicrenata bicrenata</u> Two-toothed cave isopod G4
<u>Stygobromus</u> undescribed species 4 Southern cave amphipod G3
<u>Nesticus barri</u> Barr's cave spider G3
<u>Spelobia tenebrarum</u> Cave dung fly G5

#### Vertebrates: 0

Pipistrellus subflavus Eastern pipistrelle G5

# \*Little Crow Creek Spring Cave (FR 354)

# **Location:**

**Description:** The entrance to this cave, adjacent to Little Crow Creek Cave, is a sump that requires scuba equipment, although beyond the entrance there is reportedly a 3000 foot passage. No fauna was appreciated in the entrance zone.

**Species of management concern: 0** 

Obligate subterranean species: 0

#### Vertebrates: 0

## \*Stubblefield Pit (FR 27)

### Location

**Description:** This cave consists of a 50 foot open air pit, with a short drop at the bottom that connects to a room

# Species of management concern: 2

Stygobromus undescribed species 5 Dickson's cave amphipod G2 Nesticus barri Barr's cave spider G3

## Obligate subterranean species: 4

Stygobromus undescribed species 5 Dickson's cave amphipod G2
Caecidotea bicrenata Two-toothed cave isopod G4
Nesticus barri Barr's cave spider G3
Spelobia tenebrarum Cave dung fly G5

### Vertebrates: 7

Eurycea <u>lucifuga</u> Cave salamander G4

<u>Plethodon dorsalis</u> Zigzag salamander G4

<u>Plethodon glutinosis</u> Slimy salamander G4

<u>Pipistrellus subflavus</u> Eastern pipistrelle G5

<u>Rana palustris</u> Pickerel frog G5

<u>Rana clamitans</u> Green frog G5

<u>Hyla versicolor</u> Gray treefrog G5

## \*Round Cove Cave (FR 85)

### **Location:**

**Description:** This cave receives wet-weather flow from Round Cove and has a significant dry-bed sinking stream that leads to the entrance, which is approximately 6 feet high by 30 feet wide. The cave consists of about 300 feet of walking height passage that is filled with rafts of driftwood and detritus.

## **Species of management concern: 6**

Carychium stygium Stygian carych G3
Kleptochthonius sp. cave pseudoscorpion G1
Nesticus barri Barr's cave spider G3
Tetracion jonesi Jone's cave millipede G3
Pseudotremia minos cave millipede G2
Ptomaphagus hatchi Hatch's cave fungus beetle G3

# Obligate subterranean species: 7

<u>Carychium stygium</u> Stygian carych G3 <u>Nesticus barri</u> Barr's cave spider G3 Kleptochthonius sp. cave pseudoscorpion G1
Tetracion jonesi Jone's cave millipede G3
Pseudotremia minos cave millipede G2
Ptomaphagus hatchi Hatch's cave fungus beetle G3
Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 4

Plethodon glutinosis Slimy salamander G4
Pipistrellus subflavus Eastern pipistrelle G5
Neotoma magister Eastern woodrat G4
Sayornis phoebe Eastern phoebe G5

## \*Black Hole of Calcutta (FR 84)

#### Location:

**Description:** This cave has a large entrance, approximately 12 feet high by 30 feet wide, at the base of a bluff. Wet-weather flow entering the cave sinks down a breakdown slope to a mud/detritus choke at the base. A small seep stream comes in from the ceiling at the top of a high mudbank, flowing through a series of rimstone dams before sinking into breakdown at the base.

# Species of management concern: 6

Stygobromus undescribed species 4 Southern cave amphipod G3
Nesticus barri Barr's cave spider G3
Scoterpes undescribed species cave millipede G3
Tetracion jonesi Jone's cave milliped G3
Pseudotremia minos cave millipede G2
Ptomaphagus hatchi Hatch's cave fungus beetle G3

## Obligate subterranean species: 9

Caecidotea bicrenata cave isopod G4
Stygobromus undescribed species 4 Southern cave amphipod G3
Nesticus barri Barr's cave spider G3
Phanetta subterranea Subterranean sheet-web spider G5
Scoterpes undescribed species cave millipede G3
Tetracion jonesi Jone's cave milliped G3
Pseudotremia minos cave millipede G2
Ptomaphagus hatchi Hatch's cave fungus beetle G3
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 3**

<u>Plethodon glutinosis</u> Slimy salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Sayornis phoebe</u> Eastern phoebe G5

### **GRUNDY COUNTY**

## \*Big Mouth Cave (GD 2)

### **Location:**

**Description:** This cave was described by Barr (1961). The entrance is 20 feet high by 140 feet wide and accesses to passages. The east passage is about 375 feet in length – much of the habitat in this passage has been essentially destroyed by ATVs. The other branch is a stream passage over 1000 feet in length that may be the same stream as that in adjacent Big Room Cave.

# **Species of management concern: 13**

Diacyclops yeatmani Yeatman's groundwater copepod G1

<u>Diacyclops indianensis</u> Indiana cave copepod G2

Acanthocyclops parasensitivus copepod G1

Stygobromus undescribed species 2 Davis cave amphipod G3

Orconectes australis australis Southern cave crayfish G3

<u>Pseudotremia</u> undescribed species 7 cave milliped G1

Cleidogona undescribed species millipede G1

Scoterpes ventus cave milliped G3

Tomocerus missus Relict cave springtail G1-2

Litocampa valentinei Valentine's cave dipluran G3

Pseudanophthalmus intermedius Intermediate cave beetle G2

Pseudanophthalmus humeralis cave beetle G1

Gyrinophilus palleucus Tennessee cave salamander G2/3

### Obligate subterranean species: 15

Diacyclops yeatmani Yeatman's groundwater copepod G1

Diacyclops indianensis Indiana cave copepod G2

Caecidotea bicrenata Two-toothed cave isopod G4

Stygobromus undescribed species 2 Davis cave amphipod G3

Orconectes australis australis Southern cave crayfish G3

Phanetta subterranea Subterranean sheet-web spider G5

Tetracion tennesseensis Tennessee cave milliped G4

Pseudotremia undescribed species 7 cave milliped G1

Scoterpes ventus cave milliped G3

Tomocerus missus Relict cave springtail G1-2

<u>Litocampa valentinei</u> Valentine's cave dipluran G3

Pseudanophthalmus intermedius Intermediate cave beetle G2

<u>Pseudanophthalmus humeralis</u> cave beetle G1 <u>Spelobia tenebrarum</u> Cave dung fly G5 <u>Gyrinophilus palleucus</u> Tennessee cave salamander G2/3

#### **Vertebrates: 5**

Gyrinophilus palleucus Tennessee cave salamander G2/3
Plethodon glutinosis Slimy salamander G4
Pipistrellus subflavus Eastern pipistrelle G5
Rana palustris Pickerel frog G4
Neotoma magister Eastern woodrat G4

# \*Big Room Cave (GD 3)

#### Location

**Description:** This cave was described in detail and a map presented by Barr (1961). The cave is the largest of a group of caves at the northwest end of Payne Cove, including Payne Saltpeter and Big Mouth caves. The entrance of Big Room Cave is a 15 foot pit that requires vertical gear to enter. The entrance enters a walking height passage that extends 200 feet in one direction and 400 in the other. At the end of the latter is a crawlway that leads to the Big Room, which is 8 feet high, 60-80 feet wide and 900 feet long (photo in Barr 1961). Beyond the Big Room the cave stream is encountered, then a series of passages lie beyond.

# Species of management concern: 5

Stygobromus undescribed species 2 Davis cave amphipod G3
Pseudotremia undescribed species 7 cave milliped G1
Pseudosinella spinosa Spinose cave springtail G2
Litocampa valentinei Valentine's cave dipluran G3
Pseudanophthalmus intermedius Intermediate cave beetle G2

## Obligate subterranean species: 9

Caecidotea bicrenata Two-toothed cave isopod G4
Stygobromus undescribed species 2 Davis cave amphipod G3
Phanetta subterranea Subterranean sheet-web spider G5
Tetracion tennesseensis Tennessee cave milliped G4
Pseudotremia undescribed species 7 cave milliped G1
Pseudosinella spinosa Spinose cave springtail G2
Litocampa valentinei Valentine's cave dipluran G3
Pseudanophthalmus intermedius Intermediate cave beetle G2
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 3

<u>Plethodon glutinosis</u> Slimy salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Peromyscus leucopus</u> White-footed mouse G5

# \*Payne Saltpeter Cave (GD 20)

#### Location:

**Description:** This cave was described by Barr (1961) as having a 3 foot diameter entrance abaout 250 yards east of Big Room Cave, of which it is probably genetically related. The passage goes about 120 feet to low room after which the cave continues for 135 feet, averaging 25 feet wide by 8 feet high. The cave forks and extends a short distance in each direction. The cave is damp but no water was present.

# **Species of management concern: 3**

<u>Pseudotremia</u> undescribed species 7 cave milliped G1 <u>Chaetaspis</u> sp.

Liocranoides archeri Archer's cave spider G2

# Obligate subterranean species: 7

Liocranoides archeri Archer's cave spider G2

Phanetta subterranea Subterranean sheet-web spider G5

Hesperochernes mirabilis Southeastern cave pseudoscorpion G4

Tetracion tennesseensis Tennessee cave milliped G4

Chaetaspis sp.

Pseudotremia undescribed species 7 cave milliped G1

<u>Pseudotremia</u> undescribed species 7 cave milliped G Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 4

<u>Plethodon glutinosis</u> Slimy salamander G4 <u>Plethodon dorsalis</u> Zig-zag salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 Neotoma magister Eastern woodrat G4

# \*Coppinger Cave (GD 9)

**Location:** Description: This cave was described by Barr (1961) as being a 90 foot long passage with many tall columns and stalagmites.

# **Species of management concern: 2**

<u>Litocampa</u> undescribed species cave dipluran G3 <u>Pseudanopthalmus templetoni</u> Templeton's cave beetle G2

### Obligate subterranean species: 5

Hesperochernes mirabilis Southeastern cave Pseudoscorpion G4
Litocampa undescribed species cave dipluran G3
Pseudanopthalmus templetoni Templeton's cave beetle G2
Pseudanopthalmus robustus Robust cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 4

Sayornis phoebe Eastern phoebe G5 Pipistrellus subflavus Eastern pipistrelle G5 Corynorhinus rafinesquii Rafinesque's big-eared bat G3 Neotoma magister Eastern woodrat G4

# \*Crystal Cave (GD 10)

### Location:

**Description:** Crystal Cave was described by Barr (1961) as a remnant of a downstream part of nearby Wonder Cave. After emerging from Wonder Cave, the stream sinks again flows through Crystal Cave, emerging at the spring entrance. Above the latter is an old guarry that has breeched the roof of the Crystal Cave stream passage creating the artificial Shetter Quarry Entrance. The area around the Crystal Cave entrance has many formations and was once shown as a commercial cave. The downstream end of the cave is a wide stream passage.

# **Species of management concern: 12**

Sphalloplana percoeca cave flatworm G3 Helicodiscus notius specus cave terrestrial snail G1/2 Carychium stygium Stygian carych G3 Helicina undescribed species terrestrial snail G1 Stygobromus undescribed species Davis cave amphipod G3 Orconectes australis australis Southern cave crayfish G3 Pseudotremia undescribed species 7 cave milliped G1 Scoterpes ventus cave milliped G3 Litocampa valentinei Valentines cave dipluran G3 Arrhopalites pavo Cave springtail G2 Ptomaphagus hatchi Hatch's cave fungus beetle G2 Pseudanophthalmus humeralis cave beetle G1

## Obligate subterranean species: 16

Sphalloplana percoeca cave flatworm G3 Helicodiscus notius specus cave terrestrial snail G1/2 Carychium stygium Stygian carych G3 Caecidotea bicrenata Two-toothed cave isopod G4 Stygobromus undescribed species Davis cave amphipod G3 Orconectes australis australis Southern cave crayfish G3 Phanetta subterranea Subterranean sheet-web spider G5 Tetracion tennesseensis Tennessee cave milliped G4 Pseudotremia undescribed species 7 cave milliped G1 Scoterpes ventus cave milliped G3 Litocampa valentinei Valentines cave dipluran G3 Arrhopalites pavo Cave springtail G2 Ptomaphagus hatchi Hatch's cave fungus beetle G2 Pseudanophthalmus humeralis cave beetle G1

<u>Spelobia tenebrarum</u> Cave dung fly G5 <u>Typhlichthys subterraneus</u> Southern cavefish G4

# **Vertebrates: 3**

<u>Typhlichthys</u> <u>subterraneus</u> Southern cavefish G4 <u>Pipistrellus</u> <u>subflavus</u> Eastern pipistrelle G5 Neotoma magister Eastern woodrat G4

# \*Trussell Caves (GD 26/GD 132)

#### **Location:**

**Description:** The Trussell caves were described by Barr (1961). The two caves are found on opposite ends of an elongate karst window that is about 40 feet deep. The downstream entrance is about 10 feet high by 40 feet wide. The passage is 435 feet in length. The upstream entrance is about 8 feet high and 20 feet wide. The cave stream flows out of the upstream entrance, runs through breakdown in the floor of the karst window then enters the downstream entrance. The upstream cave is 940 feet in length.

# **Species of management concern: 9**

Helicodiscus barri Barr's terrestrial snail G3
Stygobromus undescribed species 2 Davis cave amphipod G3
Chitrella archeri Archer's cave pseudoscorpion G1
Pseudotremia undescribed species Barr's cave milliped G2
Litocampa valentinei Valentine's cave dipluran G3
Scoterpes ventus cave milliped G3
Agyneta undescribed species Trussell cave sheet-web spider G1
Ptomaphagus hatchi Hatch's cave fungus beetle G2
Subterrochus ferus cave ant beetle G3

## Obligate subterranean species: 11

Helicodiscus barri Barr's terrestrial snail G3
Caecidotea bicrenata Two-toothed cave isopod G4
Stygobromus undescribed species 2 Davis cave amphipod G3
Chitrella archeri Archer's cave pseudoscorpion G1
Agyneta undescribed species Trussell cave sheet-web spider G1
Phanetta subterranea Subterranean sheet-web spider G5
Pseudotremia undescribed species Barr's cave milliped G2
Scoterpes ventus cave milliped G3
Litocampa valentinei Valentine's cave dipluran G3
Ptomaphagus hatchi Hatch's cave fungus beetle G2
Subterrochus ferus cave ant beetle G3
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 6

<u>Cottus carolinae</u> Banded sculpin G5 <u>Rana palustris</u> Pickerel frog G5 Sayornis phoebe Eastern phoebe G5
Pipistrellus subflavus Eastern pipistrelle G5
Corynorhinus rafinesquii Rafinesque's big-eared bat G3
Myotis grisescens Gray bat G3

# \*Dry Cave (GD 11)

### Location

**Description:** This cave was described by Barr (1961). Formerly used for food storage, a wooden doorhas been built inside the entrance and many boards litter the floor beyond the door. Barr's description of this section of the cave as dry and dusty was apt, but a crawlway leads to a lower level room with a large pool.

# Species of management concern: 10

Sphalloplana percoeca cave flatworm G3

Diacyclops indianensis Indiana groundwater copepod G2

Megacyclops donnaldsoni Donnaldson's cave copepod G1

Stygobromus undescribed species 2 Davis cave amphipod G3

Phanetta subterranea Subterranean sheet-web spider G5

Kleptochthonius barri Barr's cave pseudoscorpion G2

Scoterpes undescribed species cave milliped G2

Pseudotremia sp. cave millipede

Arrhopalites pavo Cave springtail G2

Arrhopalites marshalli Marshall's cave springtail G2

# Obligate subterranean species: 13

Sphalloplana percoeca cave flatworm G3

<u>Diacyclops indianensis</u> Indiana groundwater copepod G2

Megacyclops donnaldsoni Donnaldson's cave copepod G1

Stygobromus undescribed species 2 Davis cave amphipod G3

Phanetta subterranea Subterranean sheet-web spider G5

Kleptochthonius barri Barr's cave pseudoscorpion G2

Tetracion tennesseensis Tennessee cave milliped G4

Scoterpes undescribed species cave milliped G2

Pseudotremia sp. cave millipede

Arrhopalites pavo Cave springtail G2

Arrhopalites marshalli Marshall's cave springtail G2

Pseudanophthalmus robustus Robust cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Eurycea lucifuga Cave salamander G4

### \*Skull Cave (GD 24)

### **Location:**

**Description:** This cave was described by Barr (1961). It consists of a large room about 250 feet long containing massive flowstone formations and numerous rimstone pools. A short side passage with vertical drops was noted, but not examined.

# Species of management concern: 11

Helicodiscus barri Barr's terrestrial snail G3

Stygobromus undescribed species 2 Davis cave amphipod G3

Orconectes australis australis Southern cave crayfish G3

Scoterpes ventus Cave milliped G3

Pseudotremia sp. cave milliped G1/3 (1 juvenile)

Kleptochthonius barri Barr's cave pseudoscorpion G2

Anthrobia mammouthia Mammoth cave sheet-web spider G3

Arrhopalites marshalli Marshall's cave springtail G2

Pseudosinella christianseni Christiansen's cave springtail G3

Anillinus undescribed species. cave beetle G1

Pseudanophthalmus macradyi Macrady's cave beetle G2

# Obligate subterranean species: 13

Helicodiscus barri Barr's terrestrial snail G3

Stygobromus undescribed species 2 Davis cave amphipod G3

Orconectes australis australis Southern cave crayfish G3

Kleptochthonius barri Barr's cave pseudoscorpion G2

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes ventus Cave milliped G3

Pseudotremia sp. cave milliped G1/3 (1 juvenile)

Anthrobia mammouthia Mammoth cave sheet-web spider G3

Arrhopalites marshalli Marshall's cave springtail G2

Pseudosinella christianseni Christiansen's cave springtail G3

Anillinus undescribed species. cave beetle G1

Pseudanophthalmus macradyi Macrady's cave beetle G2

Spelobia tenebrarum Cave dung fly G5

### Vertebrates: 2

<u>Pipistrellus</u> <u>subflavus</u> Eastern pipistrelle G5 Neotoma magister Eastern woodrat G4

# \*Tater Cave (GD 104)

#### **Location:**

**Description:** A shelter-like entrance leads back to a streamless passage floor by breakdown.

# **Species of management concern: 5**

<u>Porrhomma cavernicola</u> Cavernicolous sheet-web spider G3 Kleptochthonius barri Barr's cave pseudoscorpion G2

<u>Scoterpes ventus</u> cave milliped G3 <u>Litocampa valentinei</u> Valentine's cave dipluran G3 Arianops undescribed species Tater cave ant beetle G1

# Obligate subterranean species: 9

Miktoniscus barri Barr's terrestrial isopod G3/4
Porrhomma cavernicola Cavernicolous sheet-web spider G3
Kleptochthonius barri Barr's cave pseudoscorpion G2
Phanetta subterranea Subterranean sheet-web spider G5
Tetracion tennesseensis Tennessee cave milliped G4
Scoterpes ventus cave milliped G3
Litocampa valentinei Valentine's cave dipluran G3
Pseudanophthalmus robustus Robust cave beetle G4
Arianops undescribed species Tater cave ant beetle G1
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 4

Sayornis phoebe Eastern phoebe G5
Pipistrellus subflavus Eastern pipistrelle G5
Eurycea lucifuga Cave salamander G4
Neotoma magister Eastern woodrat G4

## \*Wanamaker Cave (GD 27)

#### Location:

**Description:** This cave was described by Barr (1961) as being 325 feet in length. A 150 entrance passage 20 X 20 feet in size is followed by a 120 foot crawlway.

# Species of management concern: 6

Scoterpes ventus cave milliped G3

Pseudotremia undescribed species 8 Wanamakaer cave milliped G1

Pseudosinella christianseni Christiansen's cave springtail G3

Pseudanopthalmus templetoni Templeton's cave beetle G2

Pseudanophthalmus macradyi Macrady's cave beetle G2

Anillinus sp. ground beetle probable G1

### Obligate subterranean species: 8

Tetracion tennesseensis Tennessee cave milliped G4

Scoterpes ventus cave milliped G3

Pseudotremia undescribed species Barr's cave milliped G2

Pseudosinella christianseni Christiansen's cave springtail G3

Pseudanopthalmus templetoni Templeton's cave beetle G2

Pseudanophthalmus macradyi Macrady's cave beetle G2

Anillinus sp. ground beetle probable G1

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 6

Eurycea lucifuga Cave salamander G4
Plethodon glutinosis Slimy salamander G4
Bufo americanus American toad G5
Rana clamitans Green frog G5
Corynorhinus rafinesquii Rafinesque's big-eared bat G3
Pipistrellus subflavus Eastern pipistrelle G5

## \*Woodlee Cave (GD 30)

#### **Location:**

**Description:** This cave was described by Barr (1961). It has a trunk passage that is as much as 35 feet wide and 40 feet high. The primary habitat in the cave is terrestrial, although there are numerous drip pools and a stream emanating from a waterfall dome near the end of the cave.

# **Species of management concern: 7**

Sphalloplana percoeca cave flatworm G3
Stygobromus undescribed species 2 Davis cave amphipod G3
Kleptochthonius barri Barr's cave pseudoscorpion G2
Scoterpes ventus cave milliped G3
Pseudotremia sp. cave milliped (juveniles)
Pseudosinella christianseni Christiansen's cave springtail G3
Pseudanophthalmus templetoni Templeton's cave beetle G2

### Obligate subterranean species: 12

Sphalloplana percoeca cave flatworm G3
Caecidotea bicrenata Two-toothed cave isopod G4
Stygobromus undescribed species 2 Davis cave amphipod G3
Phanetta subterranea Subterranean sheet-web spider G5
Kleptochthonius barri Barr's cave pseudoscorpion G2
Tetracion tennesseensis Tennessee cave milliped G4
Scoterpes ventus cave milliped G3
Pseudotremia sp. cave milliped (juveniles)
Pseudosinella christianseni Christiansen's cave springtail G3
Pseudanophthalmus templetoni Templeton's cave beetle G2
Pseudanophthalmus beakleyi Beakley's cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

# Vertebrates: 3

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Corynorhinus rafinesquii</u> Rafinesque's big-eared bat G3 <u>Neotoma magister</u> Eastern woodrat G4

## **MARION COUNTY**

## \*Excited Cow Cave (MN 157)

#### Location:

**Description:** This cave consists of a short section of walking height passage with a crawlway continuing from a dry, dusty terminal room.

# Species of management concern: 3

Nesticus barri Barr's cave spider G3
Pseudotremia minos Russell Cave milliped G1
Scoterpes species cave milliped G2/3

## Obligate subterranean species: 6

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4

<u>Nesticus barri</u> Barr's cave spider G3

<u>Pseudotremia minos</u> Russell Cave milliped G1

<u>Scoterpes</u> species cave milliped G2/3

<u>Hesperochernes mirabilis</u> Southeastern cave pseudoscorpion G4

Spelobia tenebrarum Cave dung fly G5

### Vertebrates: 5

Plethodon dorsalis Zigzag salamander G4 Plethodon glutinosis Slimy salamander G4 Pipistrellus subflavus Eastern pipistrelle G5 Neotoma magister Eastern woodrat G4 Procyon lotor Raccoon G5

## \*White Cricket Cave (MN 75)

## **Location:**

**Description:** This cave consists of approximately 3000 feet of stream passage and associated riparian habitat. The stream exits the cave and falls into a pit about 50 feet in front of the entrance.

## Species of management concern: 4

Nesticus barri Barr's cave spider G3
Pseudotremia minos Russell Cave milliped G1
Scoterpes species cave milliped G2/3
Litocampa valentinei Valentines cave dipluran G3

### Obligate subterranean species: 7

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4

<u>Nesticus barri</u> Barr's cave spider G3

<u>Pseudotremia minos</u> Russell Cave milliped G1

<u>Scoterpes</u> species cave milliped G2/3

<u>Hesperochernes mirabilis</u> Southeastern cave pseudoscorpion G4

<u>Litocampa valentinei</u> Valentines cave dipluran G3 Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 3

<u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Neotoma magister</u> Eastern woodrat G4 Procyon lotor Raccoon G5

\*Bible Spring Cave (MN 91)

\*Bible Spring Annex Cave

## **Location:**

**Description:** The entrance to this cave is a climb-down through breakdown next to the road. The Annex cave is a short distance away and is a small, disconnected piece of the larger cave with a 5 foot high by 4 foot wide entrance next to the road. The spring cave is a high energy stream passage that was essentially clean-scoured with many waterfalls for the several hundred feet that was examined.

# Species of management concern: 1

<u>Pseudotremia</u> sp. cave milliped (juvenile)

# Obligate subterranean species: 3

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4 <u>Pseudotremia</u> sp. cave milliped (juvenile) <u>Spelobia tenebrarum</u> Cave dung fly G5

## Vertebrates:

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Eurycea longicauda</u> Long-tailed salamander G4 <u>Rana palustris</u> Pickerel frog

### \*Cedar Ridge Crystal Cave (MN 6)

#### **Location:**

**Description:** This cave was described as Cedar Hill Crystal Cave by Matthews (1971), who presented a description of the passage and three pages of photographs. The cave appears to have been encountered during road building and a gate has now been placed over the entrance. It is 670 feet in length and consists primarily of a large room filled with spectacular speleothems.

# **Species of management concern: 3**

Stygobromus exilis cave amphipod G3

Pseudotremia undescribed species 9 Skylight cave milliped G1

Pseudosinella christianseni Christiansen's cave springtail G3

# Obligate subterranean species: 4

Stygobromus exilis cave amphipod G3

Pseudotremia undescribed species 9 Skylight cave milliped G1

Pseudosinella christianseni Christiansen's cave springtail G3

Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 3**

<u>Eurycea lucifuga</u> Cave salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 Anolis carolinensis Green anole G5

# \*Clear Spring Cave (MN 201)

#### **Location:**

**Description:** The entrance to the cave is in the front yard of the owner. The entrance is overgrown with English ivy and the vines had to be cleared to crawl into the cave. Beyond the entrance crawl the passage rose to walking height, with a dry upper side passage.

# Species of management concern: 2

<u>Pseudotremia</u> sp. (juveniles) <u>Scoterpes</u> sp. (juveniles) <u>Batriasymmodes</u> <u>spelaeus</u> Cave ant beetle

# Obligate subterranean species: 5

Hesperochernes mirabilis Southeastern cave pseudoscorpion G4
Pseudotremia sp. (juveniles)
Scoterpes sp. (juveniles)
Phanetta subterranea Subterranean sheet-web spider G5
Batriasymmodes spelaeus Cave ant beetle
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 2

<u>Plethodon dorsalis</u> Zig-zag salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5

### \*Two Barrel Cave (MN 376)

#### **Location:**

**Description:** This cave is located in a sinkhole next to the owner's house. A barrel inside the entrance gathered water for a pump system. Just inside the entrance the cave turns into a crawlway.

### **Species of management concern: 0**

# Obligate subterranean species: 0

### Vertebrates: 2

Eurycea bilineata

Plethodon dorsalis Zig-zag salamander G4

# \*Skylight Cave (MN 154)

### **Location:**

**Description:** This cave has a horizontal entrance about 15 feet deep followed by a skylight pit entrance in the next room. Beyond the second entrance is a dry, formation choked passage.

# **Species of management concern: 3**

<u>Pseudotremia</u> undescribed species 9 Skylight cave milliped G1 Liocranoides archeri Archer's cave spider G2

# Obligate subterranean species: 3

<u>Pseudotremia</u> undescribed species 9 Skylight cave milliped G1 <u>Liocranoides</u> <u>archeri</u> Archer's cave spider G2 <u>Spelobia tenebrarum</u> Cave dung fly G5

#### Vertebrates: 5

<u>Plethodon dorsalis</u> Zig-zag salamander G4 <u>Plethodon glutinosis</u> Slimy salamander G4 <u>Corynorhinus rafinesquii</u> Rafinesque's big-eared bat G3/4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 Neotoma magister Eastern woodrat G4

## \*Speegle Cove Cave (MN 45)

### **Location:**

**Description:** This cave was described by Barr (1961). The cave is 798 feet in length with double entrances allowing climbdown into a large walking height passage. A large conical stalagmite about 10 feet in height has many rimstone pools surrounding it. A side passage crawl leads to a pit.

# Species of management concern: 6

Sphalloplana percoeca cave flatworm G3
Stygobromus exilis cave amphipod G3
Pseudotremia undescribed species Skylight cave millipede G1
Oreonetides undescribed species Speegle cove cave spider G1
Pseudosinella christianseni Christiansen's cave springtail G3
Ptomophagus hatchi Hatch's cave beetle G2

#### Obligate subterranean species: 9

Sphalloplana percoeca cave flatworm G3

Caecidotea bicrenata Two-toothed cave isopod G4

Stygobromus exilis cave amphipod G3

Oreonetides undescribed species Speegle cove cave spider G1

Phanetta subterranea Subterranean sheet-web spider G5

Pseudotremia undescribed species Skylight cave milliped G1

Pseudosinella christianseni Christiansen's cave springtail G3

Ptomophagus hatchi Hatch's cave beetle G2

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 5

Plethodon dorsalis Zig-zag salamander G4
Eurycea lucifuga Cave salamander G4
Pipistrellus subflavus Eastern pipistrelle G5
Neotoma magister Eastern woodrat G4
Procyon lotor Raccoon G5

# \*Pryor Spring Cave (MN 129)

#### **Location:**

**Description:** This cave is marked as Pryor Cave Spring on the USGS Sequatchie quadrangle. The cave has an entrance in the side yard of the owner's home and is visible from the road. The entrance is about 25 feet wide by 5 feet high with the cave stream emerging from it. The cave consists of about a quarter mile of walking height stream passage ending in a large, high dome with a waterfall pouring down. Reportedly another entrance to the cave exists above the dome.

## Species of management concern: 7

Cambarus hamulatus cave crayfish G2

Maymena ambita Minute cave spider G3

Litocampa valentinei Valentine's cave dipluran G3

Scoterpes ventus cave milliped G3

Pseudosinella christianseni Christiansen's cave springtail G3

Ptomophagus hatchi Hatch's cave beetle G2

Batriasymmodes spelaeus Cave ant beetle

# Obligate subterranean species: 8

Cambarus hamulatus cave crayfish G2

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes ventus cave milliped G3

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa valentinei Valentine's cave dipluran G3

Ptomophagus hatchi Hatch's cave beetle G2

Batriasymmodes spelaeus Cave ant beetle

Spelobia tenebrarum Cave dung fly G5

# **Vertebrates: 3**

<u>Plethodon dorsalis</u> Zig-zag salamander G4 <u>Rana sphenocephala</u> Southern leopard frog G5 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5

# \*Sequatchie Cave (MN 179)

### Location:

**Description:** This cave was referred to as Blowing Cave by Barr (1961). He described the entrance as 8 feet high by 10 feet wide, but did not enter as the roof drops to within 18 inches of the water just inside the entrance. We traversed the cave to a point where a slightly higher side passage intersected the stream, providing terrestrial habitat for sampling. The endangered snail occurs in the spring rather than the cave

# **Species of management concern: 5**

Pyrgulopsis ogmorphaphe Royal snail G1 (federal endangered species)

Cambarus hamulatus cave crayfish G2

Scoterpes ventus cave milliped G3 (type-locality)

Pseudotremia sp. cave milliped (juvenile)

Pseudosinella collina springtail G3

# Obligate subterranean species: 5

<u>Cambarus hamulatus</u> cave crayfish G2

<u>Phanetta subterranea</u> Subterranean sheet-web spider G5

<u>Scoterpes ventus</u> cave milliped G3 (type-locality)

<u>Pseudotremia</u> sp. cave milliped (juvenile)

<u>Spelobia tenebrarum</u> Cave dung fly G5

### Vertebrates: 2

<u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Neotoma magister</u> Eastern woodrat G4

### Nickajack Cave (MN 26)

#### Location:

**Description:** This cave was not visited but is included here based on a quantity of published records. The cave was described by Barr (1961), which was mostly flooded by a TVA dam.

### **Species of management concern: 10**

<u>Caecidotea nickajackensis</u> Nickajack cave isopod G3
<u>Stygobromus</u> undescribed species 2 Davis cave amphipod G3
<u>Crangonyx antennatus</u> Appalachian cave amphipod G4
<u>Cambarus hamulatus</u> cave crayfish G2
Microcreagris nickajackensis Nickajack cave pseudoscorpion G1

Nesticus barri Barr's cave spider G3
Litocampa cookei Cooke's cave dipluran G3
Pseudanophthalmus nickajackensis Nickajack cave beetle G1
Gyrinophilus palleucus Tennessee cave salamander G2/3
Myotis grisescens Gray bat G3

# Obligate subterranean species: 10

Caecidotea nickajackensis Nickajack cave isopod G3
Stygobromus undescribed species 2 Davis cave amphipod G3
Crangonyx antennatus Appalachian cave amphipod G4
Cambarus hamulatus cave crayfish G2
Nesticus barri Barr's cave spider G3
Microcreagris nickajackensis Nickajack cave pseudoscorpion G1
Litocampa cookei Cooke's cave dipluran G3
Pseudanophthalmus nickajackensis Nickajack cave beetle G1
Typhlichthys subterraneus Southern cavefish G4
Gyrinophilus palleucus Tennessee cave salamander G2/3

### Vertebrates: 2

<u>Typhlichthys</u> <u>subterraneus</u> Southern cavefish G4 Gyrinophilus palleucus Tennessee cave salamander G2/3

### **OVERTON COUNTY**

# \*Slippery Slit Cave

#### **Location:**

**Description:** This cave is entered via a swallowhole – accessing the cave requires going through a waterfall where a small surface stream plunges down a cliff into the cave. Beyond the waterfall is a room and then the cave pinches down to the stream.

# Species of management concern: 5

Helicodiscus barri Barr's terrestrial snail G3
Kleptochthonius pluto Pluto's cave pseudoscorpion G1
Scoterpes probably ventus Cave milliped G3
Pseudotremia undescribed species cave milliped G1
Litocampa cookei Cook's cave dipluran G3

# Obligate subterranean species: 7

Helicodiscus barri Barr's terrestrial snail G3

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes probably ventus Cave milliped G3

Pseudotremia undescribed species cave milliped G1

Litocampa cookei Cook's cave dipluran G3

Pseudanophthalmus beakleyi Beakley's cave beetle G3/4

### Vertebrates: 1

Rana palustris Pickerel frog G5

# \*Little Slippery Slit Cave

#### Location:

**Description:** This cave is entered by a rather vertical crawlway in the wall of the same swallet in which Slippery Slit Cave is found. Beyond the entrance the cave consisted of a series of crawls and small rooms with many drip pools.

# Species of management concern: 8

Carychium stygium Stygian carych G3

Stygobromus exilis cave amphipod G3

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Scoterpes probably ventus Cave milliped G3 (juveniles, needs confirmation)

Pseudotremia undescribed species cave milliped G1

Tomocerus missus Relict cave springtail G1/2

Litocampa cookei Cook's cave dipluran G3

Batriasymmodes quisnamus cave ant beetle G2

## Obligate subterranean species: 12

Carychium stygium Stygian carych G3

Stygobromus exilis cave amphipod G3

Caecidotea stygia Northern cave isopod G5

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes probably ventus Cave milliped G3 (juveniles, needs confirmation)

Pseudotremia undescribed species cave milliped G1

Tomocerus missus Relict cave springtail G1/2

Litocampa cookei Cook's cave dipluran G3

Pseudanophthalmus beakleyi Beakley's cave beetle G3/4

Batriasymmodes quisnamus cave ant beetle G2

Spelobia tenebrarum Cave dung fly G5

## **Vertebrates: 3**

Eurycea lucifuga Cave salamander G4

Neotoma magister Eastern woodrat G4

# Procyon lotor Raccoon G5

# \*Dry Slit Cave

### Location:

**Description:** This cave is downslope from Slippery Slit Cave and adjacent to Slit Spring. It has a dry shelter entrance that leads to a crawlway.

# Species of management concern: 1

Pseudotremia undescribed species cave milliped G1

# Obligate subterranean species: 3

<u>Pseudotremia</u> undescribed species cave milliped G1 <u>Sinella cavernarum</u> Cavernicolous springtail G4 Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 0

# \*Slit Spring Cave

#### Location:

**Description:** This is the presumptive exit of water from Slippery Slit Cave. The small spring entrance leads about 15 feet to a skylight entrance, after which the passage turns into an unenterable water crawl.

## Species of management concern: 0

## Obligate subterranean species: 0

# Vertebrates: 1

Gyrinophilus porphyriticus Spring salamander

#### \*Slit Shelter Cave

#### Location:

**Description:** This cave is downslope from Slippery Slit Cave. The entrance is a large shelter 20 feet high by 50 feet wide, that lowers to a dry crawlway.

### Species of management concern: 1

Pseudotremia undescribed species cave milliped G1

# Obligate subterranean species: 2

<u>Pseudotremia</u> undescribed species cave milliped G1 Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 2

Eurycea <u>lucifuga</u> Cave salamander G4 Neotoma magister Eastern woodrat G4

## \*Cooler Cave

#### **Location:**

**Description:** This cave has a stone wall over the entrance. Within about 15 feet the passage drops to a water-filled tubular crawl.

## **Species of management concern: 1**

Tomocerus undescribed species springtail G1

## Obligate subterranean species: 1

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 5

Eurycea lucifuga Cave salamander G4
Plethodon dorsalis Zigzag salamander G4
Pseudotriton ruber Red salamander G4
Sayornis phoebe Eastern Phoebe G5
Neotoma magister Eastern woodrat G4

# \*Mill Hollow Cave (OV 168)

#### Location:

**Description:** This is a major cave system with an estimate of nearly 5 miles of passages. The crawlway entrance used in 2003 descended nearly vertically through woodrat latrines and debris to a series of breakdown filled. Continuing to follow the wet-weather water channel downward we encountered upper level mudbanks in which pitfalls were placed. A climbdown through an area with much flood-stranded detritus led to the cave stream. In 2004 the main entrance was used. Entering via the shelter-like entrance the passage led through a crawlway to a large breakdown-filled passage.

## **Species of management concern: 7**

Triodopsis complanata terrestrial snail G2

Bryocamptus undescribed species cave copepod G1

Orconectes australis australis Southern cave crayfish G3

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Scoterpes ventus Cave milliped G3

Pseudotremia undescribed species 2 Mann's cave milliped G1

Litocampa undescribed species 2 undescribed cave dipluran G1

### **Obligate subterranean species: 11**

Bryocamptus undescribed species cave copepod G1

Caecidotea stygia Northern cave isopod G5
Orconectes australis australis Southern cave crayfish G3
Phanetta subterranea Subterranean sheet-web spider G5
Hesperochernes mirabilis Southeastern cave Pseudoscorpion G4
Kleptochthonius pluto Pluto's cave pseudoscorpion G1
Scoterpes ventus Cave milliped G3
Pseudotremia undescribed species 2 Mann's cave milliped G1
Litocampa undescribed species 2 undescribed cave dipluran G1
Pseudanopthalmus beakleyi North Cumberland cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 4

<u>Plethodon glutinosis</u> Slimy salamander G4 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Myotis lucifugus</u> Little brown bat G5 Neotoma magister Eastern woodrat G4

# \*Falling Springs Cave (OV 16)

#### **Location:**

**Description:** This cave was described as Falling Springs Cave by Bailey (1918) and as Falling Spring Cave by Barr (1961). The entrance receives the water from a large waterfall that plunges from above the overlying sandstone. From the wide entrance the passage descends steeply down a breakdown slope. The stream sinks into the breakdown and disappears before reaching the bottom of the cave. The total length of the cave is 375 feet.

## Species of management concern: 5

Scoterpes ventus Cave milliped G3
Pseudotremia sp. cave milliped G1
Litocampa undescribed species 2 Undescribed cave dipluran G1
Pseudanophthalmus valentinei Valentine's cave beetle G3
Pseudanophthalmus undescribed species B cave ground beetle G1

## Obligate subterranean species: 9

Miktoniscus barri Barr's cave isopod G3/4
Phanetta subterranea Subterranean sheet-web spider G5
Scoterpes ventus Cave milliped G3
Pseudotremia sp. cave milliped G1
Litocampa undescribed species 2 Undescribed cave dipluran G1
Pseudanophthalmus beakleyi North Cumberland cave beetle G3/4
Pseudanophthalmus valentinei Valentine's cave beetle G3
Pseudanophthalmus undescribed species B cave ground beetle G1
Spelobia tenebrarum Cave dung fly G5

## \*Baileys Webb Cave (OV 92)

#### Location:

**Description:** This cave is located approximately one mile west of Beaver Hill, about 400 feet east of the main entrance of Webb Cave. An estimated 250 of passage are enterable in this cave, which consists of an upper level, a stream level and interconnecting pits.

# Species of management concern: 4

Orconectes <u>australis</u> <u>australis</u> Southern cave crayfish G3

<u>Kleptochthonius pluto</u> Pluto's cave pseudoscorpion G1

<u>Scoterpes ventus</u> cave milliped G3

Pseudotremia undescribed species 2 Mann's cave milliped

## Obligate subterranean species: 7

Caecidotea stygia Northern cave isopod G5
Orconectes australis australis Southern cave crayfish G3
Kleptochthonius pluto Pluto's cave pseudoscorpion G1
Scoterpes probably S. ventus cave milliped G3
Pseudotremia undescribed species 2 Mann's cave milliped G1
Pseudanophthalmus beakleyi North Cumberland cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 6**

Eurycea lucifuga Cave salamander G4
Rana palustris Pickerel frog G5
Neotoma magister Eastern woodrat G4
Peromyscus leucopus White-footed mouse G5
Procyon lotor Raccoon G5
Sayornis phoebe Eastern Phoebe G5

## \*Webb Cave (OV 39)

#### Location:

**Description:** This is a multi-level cave with a total of 2163 feet of mapped passages reported. In 2003 the upper two levels of the cave were sampled. The uppermost level consists of a passage that connects two entrances about 450 feet apart. A small seep stream and pools were present in this level. The part of the second level examined consisted of breakdown rooms. In 2004 the cave was re-examined to sample a complex of pits leading to the two lowest levels of the cave. This section of the cave was different in nature, in general wetter and muddier.

# Species of management concern: 10

<u>Helicodiscus</u> <u>hadenoceus</u> Hubricht cave disc snail G2

<u>Stygobromus</u> undescribed species Undescribed cave amphipod G1

<u>Scoterpes</u> <u>ventus</u> cave milliped G3

Pseudotremia undescribed species 2 Mann's cave milliped G1

Nesticus stygius Stygian cave spider G1

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Litocampa cookei Cook's cave dipluran G3

Arrhopalites marshalli Marshall's cave springtail G2

Nelsonites walteri Walter's cave beetle G2

<u>Pseudanophthalmus valentinei</u> Valentine's cave beetle G2

# Obligate subterranean species: 11

Helicodiscus hadenoceus Hubricht cave disc snail G2

Stygobromus undescribed species Undescribed cave amphipod G1

Caecidotea stygia Northern cave isopod G5

Scoterpes ventus cave milliped G3

Pseudotremia undescribed species 2 Mann's cave milliped G1

Nesticus stygius Stygian cave spider G1

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Arrhopalites marshalli Marshall's cave springtail G2

Litocampa cookei Cook's cave dipluran G3

Nelsonites walteri Walter's cave beetle G2

Pseudanophthalmus valentinei Valentine's cave beetle G2

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates:

Neotoma magister Eastern woodrat G4

Procyon lotor Raccoon G5

Sayornis phoebe Eastern Phoebe G5

## \*Three Forks Cave (OV 37)

#### **Location:**

**Description:** This cave was described by Barr (1961). A large entrance is prominent next to the county road. A walking height passage connects a second entrance in a roadcut and continues on to the end of the cave, totaling less than 300 feet of passage. A deep sump to a stream has been closed by breakdown associated with the second entrance intersection with the road.

## **Species of management concern: 6**

Nesticus barri Barr's cave spider G3

Pseudotremia undescribed species 5 Three Forks cave milliped G1

Litocampa cookei Cook's cave dipluran G3

Arrhopalites marshalli Marshall's cave springtail G2

Pseudosinella christianseni Christiansen's cave springtail G3

Pseudanophthalmus valentinei Valentine's cave beetle G2

# Obligate subterranean species: 9

Caecidotea stygia Northern cave isopod G5

Nesticus barri Barr's cave spider G3

Phanetta subterranean Subterranean sheet-web spider G5
Pseudotremia undescribed species 5 Three Forks cave millipede
Arrhopalites marshalli Marshall's cave springtail G2
Pseudosinella christianseni Christiansen's cave springtail G3
Litocampa cookei Cook's cave dipluran G3
Pseudanophthalmus valentinei Valentine's cave beetle G2
Spelobia tenebrarum Cave dung fly G5

## **Vertebrates: 3**

<u>Hirundo rustica</u> Barn swallow <u>G5</u> <u>Neotoma magister</u> Eastern woodrat G4 Procyon lotor Raccoon G5

## \*Garretts Mill Cave (OV 159)

#### Location:

**Description:** The site is marked as "Garretts Mill" on the USGS Livingston quadrangle map in a scenic spring alcove. The cave has three entrances in the spring alcove. Inside the entrance a stream crawlway is encountered, after which the passage opens up and approximately a mile of trunk passage is present.

# **Species of management concern: 3**

<u>Pseudotremia</u> sp. cave milliped <u>Kleptochthonius pluto</u> Pluto's cave pseudoscorpion G1 <u>Pseudosinella christianseni</u> Christiansen's cave springtail G3

## Obligate subterranean species: 6

Caecidotea stygia Northern cave isopod G5
Phanetta subterranea Subterranean sheet-web spider G5
Pseudotremia sp. cave milliped
Kleptochthonius pluto Pluto's cave pseudoscorpion G1
Pseudosinella christianseni Christiansen's cave springtail G3
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 5**

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Myotis lucifugus</u> Little brown bat G5 <u>Neotoma magister</u> Eastern woodrat G4 <u>Procyon lotor</u> Raccoon G5 <u>Sayornis phoebe</u> Eastern Phoebe G5

#### \*Overton Indian Cave (OV 83)

#### Location:

**Description:** This cave is about 200 feet in length and consists of a short walking height passage.

# **Species of management concern: 3**

Sphalloplana percoeca cave flatworm G3

Pseudotremia sp. cave milliped

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

## Obligate subterranean species: 7

Sphalloplana percoeca cave flatworm G3

Caecidotea stygia Northern cave isopod G5

Phanetta subterranea Subterranean sheet-web spider

Pseudotremia sp. cave milliped

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Pseudanophthalmus beakleyi Beakley's cave beetle G4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 3

Neotoma magister Eastern woodrat G4

Procyon lotor Raccoon G5

Sayornis phoebe Eastern Phoebe G5

## \*Marie Cave (OV 61)

#### **Location:**

**Description:** This is a short, shelter-like cave with a short pit that receives a small

stream.

## **Species of management concern: 1**

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

## Obligate subterranean species: 3

Kleptochthonius pluto Pluto's cave pseudoscorpion G1

Hesperochernes miriabilis Southeastern cave pseudoscorpion G4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Neotoma magister Eastern woodrat G4

#### PICKETT COUNTY

## **Bunkum Cave (PI 2)**

#### **Location:**

**Description:** This cave is found along a stream valley in an area where the limestone walls form a canyon. The entrance to this cave is very large and leads into the walking height main stream passage. About 700 feet of passage along the stream were sampled, as well as a stream passage encountered on the left as one walks upstream, and a passage

entered along the right wall by climbing up some large rimstone dams and flowstone. The stream passage is comprised of alternating riffles and pools, mostly with gravel and breakdown substrate. Riparian mudbanks occur along the length of the stream passage.

## Species of management concern: 12

Sphalloplana percoeca cave flatworm G3

Stenotrema angellum terrestrial snail G3

Diacyclops undescribed species Indiana groundwater copepod G1

Stygobromus exilis Cave amphipod crustacean G3

Kleptochthonius rex Bunkum cave pseudoscorpion G1

Pseudotremia undescribed species 1 Wallace's cave milliped G1

Pseudosinella orba Cave springtail G2

Nelsonites walteri Southern long-horned cave beetle (sight record J.R. Holsinger)

Batriasymmodes quisnamus cave ant beetle G2

# Obligate subterranean species: 13

Sphalloplana percoeca cave flatworm G3

Diacyclops undescribed species Indiana groundwater copepod G1

Caecidotea stygia Northern cave isopod G4

Stygobromus exilis Cave amphipod crustacean G3

Phanetta subterranea Subterranean sheet-web spider G5

Kleptochthonius rex Bunkum cave pseudoscorpion G1

Pseudotremia undescribed species 1 Wallace's cave milliped G1

Sinella cavernarum Cavernicolous springtail G4

Pseudosinella orba Cave springtail G2

Nelsonites walteri Southern long-horned cave beetle (sight record J.R. Holsinger)

Pseudanophthalmus beakleyi North Cumberland cave beetle G3/4

Batriasymmodes quisnamus cave ant beetle G2

Spelobia tenebrarum Cave dung beetle G5

# Vertebrates: 6

Eurycea lucifuga Cave salamander G4

Myotis lucifugus Little brown bat G4

Corynorhinus rafinesquii TX Rafinesque's big-eared bat G3/4

Neotoma magister Eastern woodrat G4

Procyon lotor Raccoon G5

Sayornis phoebe Eastern Phoebe G5

#### Frog Cave (PI 45)

#### **Location:**

**Description:** This cave is directly adjacent to Bunkum Cave on the other side of the canyon. This cave consists of a mixture of crawlways, domes, low rooms and narrow canyon passages with a small stream that intersects in a couple of places. The mudbanks and breakdown habitat have been enriched by woodrat debris and latrines.

## Species of management concern: 2

<u>Liocranoides</u> sp. Two-clawed spider G3
<u>Pseudotremia</u> undescribed species 1 Wallace's cave milliped G1

## Obligate subterranean species: 4

<u>Caecidotea stygia</u> Northern cave isopod G4

<u>Phanetta subterranea</u> Subterranean sheet-web spider G5

<u>Pseudotremia</u> undescribed species 1 Wallace's cave milliped G1

<u>Pseudanophthalmus beakleyi North Cumberland cave beetle G3/4</u>

#### **Vertebrates: 3**

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Plethodon glutinosus</u> Slimy salamander G4 Neotoma magister Eastern woodrat G4

#### Cave near Bunkum Cave

#### Location:

**Description:** This cave is located in the bottom of a small sinkhole near the path to Bunkum Cave. Sliding down a rocky debris slope allows entry into a narrow passage about 3-4 feet high and perhaps 12 feet in length. On the date of our visit (12 September 2003) there was a stream flowing across the floor of the cave as well as numerous small waterfalls emerging from cracks in the ceiling. The cave was so wet that there was essentially no terrestrial habitat anywhere in it.

## Species of management concern: 0

#### Obligate subterranean species: 1

Caecidotea stygia Northern cave isopod G4

#### Vertebrates: 2

Eurycea <u>lucifuga</u> Cave salamander G4 <u>Procyon lotor</u> Raccoon G5

#### RHEA COUNTY

#### \*Marler Cave (RH 4)

#### **Location:**

**Description:** This cave consists of a mostly walking height passage with many mudbanks.

#### **Species of management concern: 2**

Stygobromus sp. cave amphipod G?
Scoterpes undescribed species cave milliped G1

# Obligate subterranean species: 3

Stygobromus sp. cave amphipod G?

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes undescribed species cave milliped G1

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 8

Eurycea lucifuga Cave salamander G4
Plethodon glutinosus Slimy salamander G4
Eurycea longicauda Long-tailed salamander G4
Plethodon dorsalis Zigzag salamander G4
Sayornis phoebe Eastern phoebe G5
Pipistrellus subflavus Eastern pipistrelle G5
Neotoma magister Eastern woodrat G4
Procyon lotor Raccoon G5

## \*Raymer Cave (RH 5)

#### Location:

**Description:** This cave is entered by descending through a small hole down a steep slope – a barge rope has been rigged by the owner to ease entry. A small section of stream passage is accessible which continues upstream as a tubular crawlway. A total of 866 feet of passages have been mapped in the cave.

## **Species of management concern: 1**

<u>Scoterpes</u> undescribed species cave milliped G1 Pseudosinella collina springtail G3

## Obligate subterranean species: 4

<u>Caecidotea</u> sp. cave isopod <u>Phanetta subterranea</u> Subterranean sheet-web spider G5 <u>Scoterpes</u> undescribed species cave milliped G1 <u>Spelobia tenebrarum</u> Cave dung fly G5

#### Vertebrates: 1

Procyon lotor Raccoon G5

## SEQUATCHIE COUNTY

# \*Keyhole Cave (SQ 15)

#### **Location:**

**Description:** The entrance to this cave is a swallowhole that leads immediately to the intersection of a upper level side passage and the lower stream level. Much organic debris is introduced. The stream passage led to an upper level breakdown with numerous rimstone pools.

## **Species of management concern: 5**

Stygobromus sp. possibly exilis cave amphipod G3

Cambarus hamulatus cave crayfish G2

Pseudotremia undescribed species Holliday's cave milliped G1

Litocampa undescribed species cave dipluran G3

Pseudanophthalmus undescribed species Keyhole cave beetle G1

## Obligate subterranean species: 6

Stygobromus sp. possibly exilis cave amphipod G3

Cambarus hamulatus cave crayfish G2

Pseudotremia undescribed species Holliday's cave milliped G1

Litocampa undescribed species cave dipluran G3

Pseudanophthalmus undescribed species Keyhole cave beetle G1

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Eurycea lucifuga Cave salamander G4

## \*Wilmoth Cave (SQ 5)

#### **Location:**

**Description:** This cave was described by Matthews (1971). Wilmoth Cave is entered at the base of a cliff and leads down to a stream passage. The stream was mud-bottomed and little fauna was noted other than crayfish and sculpin. One of the crawlways in the cave trends toward nearby Stevenson Cave.

#### Species of management concern: 5

Cambarus hamulatus Cave crayfish G2

Scoterpes ventus Cave milliped G3

Litocampa undescribed species cave dipluran G3

Pseudosinella christianseni Christiansen's cave springtail G3

Pseudanophthalmus sp. Cave beetle

#### **Obligate subterranean species: 8**

Cambarus hamulatus Cave crayfish G2

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes ventus Cave milliped G3

Pseudotremia sp. Cave milliped (juveniles only)

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa undescribed species cave dipluran G3

Pseudanophthalmus sp. Cave beetle

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 1

Cottus carolinae Banded sculpin G5

## \*Stone Cave (SQ 7)

#### Location:

**Description:** This cave was described by Barr (1961) as having an entrance about 10 feet wide by 5 feet high. High water at the time of his visit dissuaded him from entering. The entrance has been covered with a stone wall, with wall to wall water behind it. A back entrance in a sinkhole on the hill over the spring entrance allows access to a riparian mudbank that meets the same stream, which sumped upstream. Biofilms were present on the stones and no aquatic fauna could be appreciated.

## Species of management concern: 0

## Obligate subterranean species: 2

<u>Miktoniscus</u> <u>barri</u> Barr's terrestrial isopod G3/4 <u>Spelobia tenebrarum</u> Cave dung fly G5

## **Vertebrates: 3**

<u>Eurycea lucifuga</u> Cave salamander G4 <u>Plethodon glutinosus</u> Slimy salamander G4 <u>Plethodon dorsalis</u> Zigzag salamander G4

#### VAN BUREN COUNTY

Rumbling Falls Cave System
Rumbling Falls Cave
Swamp River Cave
Thunder Run Cave

## Location:

**Description:** This cave is comprised of a major river system with approximately 16 miles of surveyed passages. The three caves listed above were sampled by Lewis (2001) and comprise pieces of the same system.

## **Species of management concern: 13**

Sphalloplana percoeca cave flatworm G3

Diacyclops yeatmani Yeatman's groundwater copepod G1

Stygobromus undescribed species 2 Davis cave amphipod G3

Orconectes australis australis Southern cave crayfish G3

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudosinella spinosa Spinose cave springtail G2

Pseudosinella undescribed species #1 Undescribed cave springtail G1

Neanura undescribed species undescribed springtail G1

Onychiurus undescribed species undescribed springtail G1

Litocampa undescribed species - Undescribed dipluran G2

Nelsonites walteri Southern long-horned cave beetle G2

<u>Pseudanophthalmus</u> <u>vanburenensis</u> Vanburen cave beetle G1 Pseudanophthalmus undescribed species Lost River cave beetle G1

# Obligate subterranean species: 19

Sphalloplana percoeca cave flatworm G3

Diacyclops yeatmani Yeatman's groundwater copepod G1

Caecidotea bicrenata Two-toothed cave isopod G4

Stygobromus undescribed species 2 Davis cave amphipod G3

Orconectes australis australis Southern cave crayfish G3

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Phanetta subterranea Subterranean sheet-web spider G5

Tetracion tennesseensis Tennessee cave milliped G4

Pseudosinella spinosa Spinose cave springtail G2

Pseudosinella undescribed species #1 Undescribed cave springtail G1

Neanura undescribed species undescribed springtail G1

Onychiurus undescribed species undescribed springtail G1

Litocampa undescribed species - Undescribed dipluran G2

Nelsonites walteri Southern long-horned cave beetle G2

Pseudanophthalmus vanburenensis Vanburen cave beetle G1

Pseudanophthalmus undescribed species Lost River cave beetle G1

Pseudanophthalmus robustus Robust cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

Typhlichthys subterraneus Southern cavefish G4

#### Vertebrates: 2

Pipistrellus subflavus Eastern pipistrelle G5

Typhlichthys subterraneus Southern cavefish G4

#### **CAMPS GULF AREA**

Two groups of caves were sampled in this area. Lewis (2002) reported on an assemblage located along Camps Gulf Branch and are probably best considered with Camps Gulf Cave as a single element occurrence. In 2004 four additional caves were visited along a tributary to Perry Branch (the next drainage to the north).

#### **Camps Gulf Branch caves**

#### Camps Gulf Cave (VB 2)

#### **Location:**

**Description:** The passages near the entrance to the cave are large and were described by Barr (1961). Subsequent to Barr's description a route was discovered that led to a series of enormous rooms and the cave's river. The cave is presently surveyed at 28,000 feet and an active mapping program is being conducted there (Tennessee Cave Survey, 2002).

# Species of management concern: 8

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Chaetaspis mollis Cumberland cave milliped G1

Diacyclops yeatmani Yeatman's groundwater copepod G1

Stygobromus undescribed species - Undescribed amphipod crustacean G2

Scoterpes ventus Eastern Tennessee cave milliped G2

Litocampa undescribed species - Undescribed dipluran G2

Nelsonites walteri Southern long-horned cave beetle G2

Orconectes australis australis Southern cave crayfish G3

## Obligate subterranean species: 13

Diacyclops yeatmani Yeatman's groundwater copepod G1

Caecidotea bicrenata Two-toothed cave isopod G4

Stygobromus undescribed species - Undescribed amphipod crustacean G2

Orconectes australis australis Southern cave crayfish G3

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Phanetta subterranea Subterranean sheet-web spider G5

Chaetaspis mollis Cumberland cave milliped G1

Scoterpes ventus Eastern Tennessee cave milliped G3

Litocampa undescribed species - Undescribed dipluran G2

Nelsonites walteri Southern long-horned cave beetle G2

Pseudanophthalmus robustus Robust cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

Typhlichthys subterraneus Southern cavefish G4

#### Vertebrates: 2

<u>Pipistrellus</u> <u>subflavus</u> Eastern pipistrelle G5

Typhlichthys subterraneus Southern cavefish G4

## Phineas Finn Cave (VB 247)

## **Location:**

**Description:** This cave consists of 534 feet of passages in the Monteagle Limestone connecting six entrances (Tennessee Cave Survey, 2002).

## **Species of management concern: 0**

## Obligate subterranean species: 2

<u>Tetracion tennesseensis</u> Tennessee cave milliped G4 Spelobia tenebrarum Cave dung fly

#### Vertebrates: 4

Plethodon dorsalis Zigzag salamander G5

Plethodon glutinosis Slimy salamander G4

Sayornis phoebe Eastern phoebe G5

Neotoma magister Eastern woodrat G4

# **Plantagenet Hole (VB 242)**

#### Location:

**Description:** The cave is comprised of 66 feet of passage in the Monteagle Limestone that comes within about 10 feet of connecting with Palliser Cave (Tennessee Cave Survey, 2002).

## Species of management concern: 0

# **Obligate subterranean species: 1** Spelobia tenebrarum Cave dung fly

#### Vertebrates: 5

Rana palustris Pickerel frog
Eurycea lucifuga Cave salamander
Plethodon dorsalis Zigzag salamander
Plethodon glutinosis Slimy salamander
Neotoma magister Eastern woodrat

## Case Brothers Cave (VB 169)

#### **Location:**

**Description:** This cave is 265 feet long and is formed in the Monteagle Limestone (Tennessee Cave Survey, 2002).

## Species of management concern: 0

#### Obligate subterranean species: 3

<u>Tetracion tennesseensis</u> Tennessee cave milliped G4 <u>Pseudanophthalmus robustus</u> Robust cave beetle G3/4 Spelobia tenebrarum Cave dung fly G5

## **Vertebrates: 2**

<u>Plethodon glutinosis</u> Slimy salamander G4 Neotoma magister Eastern woodratG4

## Palliser Cave (VB 245)

#### Location:

**Description:** This cave contains 695 feet of passage in the Monteagle Limestone. A small stream is found in the rear of the cave, as well as a sizable pool at a higher level.

# **Species of management concern: 5**

Arrhopalites undescribed species Undescribed cave springtail G1

Pseudosinella spinosa Spinose cave springtail G2

Liocranoides sp. two-clawed spider G2

Scoterpes ventus Eastern Tennessee cave milliped G3

Litocampa undescribed species - undescribed dipluran G2

# Obligate subterranean species: 8

Caecidotea bicrenata Two-toothed cave isopod G4
Scoterpes ventus Eastern Tennessee cave milliped G3
Tetracion tennesseensis Tennessee cave milliped G4
Arrhopalites undescribed species Undescribed cave springtail G1
Pseudosinella spinosa Spinose cave springtail G2
Litocampa undescribed species - undescribed dipluran G2
Pseudanophthalmus robustus Robust cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### **Vertebrates: 5**

Eurycea lucifuga Cave salamander G4
Plethodon dorsalis Zigzag salamander G4
Plethodon glutinosis Slimy salamander G4
Neotoma magister Eastern woodrat G4
Myotis septentrionalis Long eared bat G4

# **Glencora Spring Cave (VB 246)**

#### **Location:**

**Description:** This cave is a hands and knees stream crawl comprising 220 feet of passage in the Monteagle Limestone (Tennessee Cave Survey, 2002).

## **Species of management concern: 3**

Scoterpes ventus Eastern Tennessee cave milliped G3

<u>Pseudosinella christianseni</u> Salmon TB Christiansen's cave springtail G2

<u>Litocampa</u> undescribed species - undescribed dipluran G2

#### Obligate subterranean species: 7

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4
<u>Scoterpes ventus</u> Eastern Tennessee cave milliped G3
<u>Pseudosinella christianseni</u> Christiansen's cave springtail G2
<u>Pseudanophthalmus robustus</u> Robust cave beetle G3/4
<u>Spelobia tenebrarum</u> Cave dung fly G5

Vertebrates: none

## Handcracker Cave (VB 243)

#### Location:

**Description:** Handcracker Cave is reported to have 450 feet of passage formed in the Monteagle Limestone. The cave is largely a vertical descent to a stream. Confusion exists as to the identity of the cave that was sampled. A cave was entered at the location provided for Handcracker, but it was a short section of horizontal passage.

## Species of management concern: 0

# Obligate subterranean species: 1

Pseudosinella sp.

## Vertebrates: 2

<u>Plethodon glutinosis</u> Slimy salamander G4 Neotoma magister Eastern woodrat 4

## **Perry Branch Caves**

## \*Cagle Saltpeter Cave (VB 147)

#### Location:

**Description:** This cave was mined for saltpeter and is a current site of archaeological research. It is primarily a large breakdown strewn passage.

# **Species of management concern: 3**

<u>Stygobromus</u> undescribed species Bosnak's cave amphipod G2 <u>Kleptochtonius</u> <u>daemonius</u> McElroy cave pseudoscorpion G2 <u>Litocampa</u> undescribed species cave dipluran G3

## Obligate subterranean species: 5

Stygobromus undescribed species Bosnak's cave amphipod G2
Kleptochtonius daemonius McElroy cave pseudoscorpion G2
Phanetta subterranea Subterranean sheet-web spider G5
Litocampa undescribed species cave dipluran G3
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 4

Plethodon glutinosis Slimy salamander G4
Neotoma magister Eastern woodrat G4
Procyon lotor Raccoon G5
Sayornis phoebe Eastern Phoebe G5

## \*Cane Creek Saltpeter Cave (VB 3)

#### Location:

**Description:** This cave was described by Barr (1961). It is entered via an opening in the sandstone that is 15 feet high by 50 feet wide, descending into a large room with a number of poorly preserved saltpeter mining artifacts. Beyond this room is a breakdown, over which the cave continues as a low crawlway to a second large room that contained a mound of bat guano. Except for pools near the entrance the cave contained no water.

## Species of management concern: 5

Sphalloplana percoeca cave flatworm G3
Kleptochtonius daemonius McElroy cave pseudoscorpion G2
Anthrobia mammouthia Mammoth cave sheet-web spider G3
Litocampa undescribed species cave dipluran G3
Batrisodes sp. cave ant beetle

# Obligate subterranean species: 7

Sphalloplana percoeca cave flatworm G3

Tetracion tennesseensis Tennessee cave milliped G4

Phanetta subterranea Subterranean sheet-web spider G5

Anthrobia mammouthia Mammoth cave sheet-web spider G3

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Litocampa undescribed species cave dipluran G3

Batrisodes sp. cave ant beetle

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 2

<u>Plethodon glutinosis</u> Slimy salamander <u>Neotoma magister</u> Eastern woodrat G4

## \*Cave Between Caves

## **Location:**

**Description:** As the name implies, this cave lies between Cane Creek Saltpeter Cave and Sandstone Cave. Cave Between Caves was remarkable for its flowstone formations encrusted with moist cricket guano – the combination of the quantity of the guano and the appropriate level of moisture made this site one of the most biologically productive communities that was seen during the bioinventory project. The aquatic fauna was found in isolated rimstone pools.

#### Species of management concern: 12

Helicodiscus barri Barr's terrestrial snail G3
Carychium stygium Stygian carych G3
Sphalloplana percoeca cave flatworm G3
Stygobromus undescribed species Bosnak's cave amphipod G2
Stygobromus undescribed species Davis cave amphipod G3

Scoterpes ventus cave milliped G3

Chaetaspis mollis cave milliped G1

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa undescribed species cave dipluran G3

Pseudanophthalmus undescribed species cave ground beetle G1

Subterrochus undescribed species Cave Between cave ant beetle G1

## Obligate subterranean species: 16

Helicodiscus barri Barr's terrestrial snail G3

Carychium stygium Stygian carych G3

Sphalloplana percoeca cave flatworm G3

Stygobromus undescribed species Bosnak's cave amphipod G2

Stygobromus undescribed species Davis cave amphipod G3

Caecidotea bicrenata cave isopod G4

Phanetta subterranea Subterranean sheet-web spider G5

Scoterpes ventus cave milliped G3

Tetracion tennesseensis Tennessee cave milliped G4

Chaetaspis mollis cave milliped G1

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudosinella christianseni Christiansen's cave springtail G3

Litocampa undescribed species cave dipluran G3

Pseudanophthalmus undescribed species cave ground beetle G1

Subterrochus undescribed species Cave Between cave ant beetle G1

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Neotoma magister Eastern woodrat G4

#### \*Sandstone Cave (VB 13)

## **Location:**

**Description:** This cave was quite similar to its neighbor, Cave Between Caves, with many guano-covered flowstone mounds and mudbanks, but the moisture content of the guano was either too much/too little to achieve the community development seen there.

#### **Species of management concern: 4**

Appaleptoneta sp. leptonetid spider G1

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudosinella undescribed species cave springtail G1

Litocampa undescribed species cave dipluran G3

# Obligate subterranean species: 7

<u>Tetracion</u> <u>tennesseensis</u> Tennessee cave milliped G4

Phanetta subterranea Subterranean sheet-web spider G5

Appaleptoneta sp. leptonetid spider G1
Kleptochtonius daemonius McElroy cave pseudoscorpion G2
Pseudosinella undescribed species cave springtail G1
Litocampa undescribed species cave dipluran G3
Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 1

Neotoma magister Eastern woodrat G4

#### **CUMMINGS COVE**

## **Upper Cummings Cove Cave (VB 212)**

## **Location:**

**Description:** The cave is unmapped but consists of an estimated 5,000 feet of stream passage (Tennessee Cave Survey, 2002). It is formed in the Bangor Limestone. The water from this cave emerges as a spring, where it falls over the Hartselle Sandstone and enters Cummings Cove Cave.

# Species of management concern: 6

Helicodiscus sp. terrestrial snail G1

Apochthonius minor pseudoscorpion G1

Pseudosinella undescribed species near nata - Undescribed cave springtail G1

Litocampa undescribed species - Undescribed dipluran G2

Scoterpes ventus Eastern Tennessee cave milliped G3

Nelsonites walteri Southern long-horned cave beetle G2

## Obligate subterranean species: 9

Helicodiscus sp. TB? terrestrial snail

Caecidotea bicrenata Two-toothed cave isopod G4

Tetracion tennesseensis Tennessee cave milliped G4

Apochthonius minor pseudoscorpion G1

Pseudosinella undescribed species near nata - Undescribed cave springtail

Sinella cavernarum Cavernicolous springtail G4

Litocampa undescribed species - Undescribed dipluran G1

Nelsonites walteri Nelsonites walteri Southern long-horned cave beetle

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Neotoma magister Eastern woodrat G4

# **Cummings Cove Cave (VB5)**

#### Location:

**Description:** This cave was described as a shelter by Barr (1961), but actually has a stream passage with an estimated length of 350 feet that leads upstream from the shelter and connects to a second entrance (Tennessee Cave Survey, 2002).

## **Species of management concern: 7**

Theromaster undescribed species harvestman G1
Hypogastrura undescribed species - undescribed springtail G1
Pseudosinella undescribed species Undescribed cave springtail G1
Phalangodes appalachius cave harvestman G3
Liocranoides sp. two-clawed spider G2
Scoterpes ventus Eastern Tennessee cave milliped G2
Pseudosinella collina springtail G2

## Obligate subterranean species: 6

Caecidotea bicrenata Two-toothed cave isopod G4

Phalangodes appalachius cave harvestman G3

Tetracion tennesseensis Cumberland Caverns milliped G4

Scoterpes ventus Eastern Tennessee cave milliped G3

Phanetta subterranea Subterranean sheet-web spider G5

Pseudosinella undescribed species Undescribed cave springtail G2

## Vertebrates: 2

Neotoma magister Eastern woodrat G4
Pipistrellus subflavus Eastern pipistrelle G5

# Va-ju-de Cave, Van Buren County

#### Location:

**Description:** This cave lies below Cummings Cove Cave and receives the water from it. The entrance was opened by blasting and much loose rock still exists there. The cave is unmapped, but consists of an estimated 600 feet of stream passage (Smith, personal communication).

## Species of management concern: 4

<u>Kleptochtonius daemonius</u> McElroy cave pseudoscorpion G2
<u>Pseudosinella</u> undescribed sp. - Undescribed cave springtail G1
<u>Scoterpes ventus</u> Eastern Tennessee cave milliped G3

#### **Obligate subterranean species: 4**

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4
<u>Scoterpes ventus</u> Eastern Tennessee cave milliped G3
<u>Kleptochtonius daemonius</u> McElroy cave pseudoscorpion G2
<u>Pseudosinella</u> undescribed sp. - Undescribed cave springtail G1

#### Vertebrates: 1

Neotoma magister Eastern woodrat G4

#### LAUREL CREEK AREA

## **Laurel Creek Cave (VB 133)**

#### Location:

**Description:** The cave consists of 7,039 feet of stream passages formed in the Bangor Limestone (Tennessee Cave Survey, 2002).

## **Species of management concern: 8**

Glyphalinia carolinensis (Cockerell) TX terrestrial snail

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudanophthalmus undescribed species Rumbling Falls Cave beetle G1

Aloconota diversiseta rove beetle G1

Scoterpes ventus Eastern Tennessee cave milliped G2

Litocampa undescribed species - Undescribed dipluran G2

Myotis grisescens Gray bat G3

Glyphalinia carolinensis terrestrial snail G3

# Obligate subterranean species: 10

Caecidotea bicrenata Two-toothed cave isopod G4

Scoterpes ventus Eastern Tennessee cave milliped G3

<u>Tetracion</u> tennesseensis Tennessee cave milliped G4

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Phanetta subterranea Subterranean sheet-web spider G5

Litocampa undescribed species - Undescribed dipluran

Pseudanophthalmus undescribed species Rumbling Falls Cave beetle G1

Pseudanophthalmus robustus Robust cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 5

Rana palustris Pickerel frog

Eurycea lucifuga Cave salamander

Plethodon dorsalis Zigzag salamander

Myotis grisescens Gray bat

Pipistrellus subflavus Eastern pipistrelle

## Swift Cave (VB 111)

#### Location:

**Description:** This cave is a short section of stream passage adjacent to Laurel Spring

Cave.

# Species of management concern: 1

Orconectes australis Southern cave crayfish G3

# Obligate subterranean species: 5

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4
<u>Orconectes australis</u> Southern cave crayfish G3
<u>Tetracion tennesseensis</u> Tennessee cave milliped G4
<u>Pseudanophthalmus robustus</u> Robust cave beetle G3/4
<u>Spelobia tenebrarum</u> Cave dung fly G5

## Vertebrates: 2

<u>Eurycea lucifuga</u> Cave salamander G4 Plethodon dorsalis Zigzag salamander G4

## **Rotifer Cave (VB 161)**

## **Location:**

**Description:** This is an 80 foot long cave with five entrances formed in the Hartselle Sandstone (Tennessee Cave Survey, 2002).

# **Species of management concern: 1**

Lepidocyrtus helenae Helen's springtail G3

## Obligate subterranean species: none

#### **Vertebrates:**

Neotoma magister Eastern woodrat G4

## **Antelope Cave (VB 162)**

#### Location:

**Description:** This is a 100 foot long cave with four entrances formed in the Hartselle Sandstone (Tennessee Cave Survey, 2002).

## Species of management concern: 0

Obligate subterranean species: none

## Vertebrates: 1

Neotoma magister Eastern woodrat G4

#### Black Hole with Water, Van Buren County (VB 112)

#### **Location:**

**Description:** This 70 foot cave consists of a pitlike sinkhole entrance with a waterfall pouring from the ceiling of the entrance. A second, 12 foot pit exists in the floor of the entrance (Tennessee Cave Survey, 2002). The cave is formed in the Monteagle Limestone.

## Species of management concern: 1

Kleptochthonius undescribed species Cave-loving grayhanded pseudoscorpion G1

## Obligate subterranean species: 1

Phanetta subterranea Subterranean sheet-web spider

Vertebrates: 0

## Pennywinkle Spring & Cave, Van Buren County (VB 173)

#### **Location:**

**Description:** Formed in the St. Louis Limestone, this series of springs is the main source of Laurel Creek. The cave consists of about 500 feet of passage, mostly filled with deep water.

# **Species of management concern: 3**

Sphalloplana percoeca cave flatworm G2
Orconectes australis Southern cave crayfish G3
Typhlichthys subterraneus Southern cavefish G4

## Obligate subterranean species: 4

Sphalloplana percoeca cave flatworm G3
Caecidotea bicrenata Two-toothed cave isopod G4
Orconectes australis Southern cave crayfish G3
Typhlichthys subterraneus Southern cavefish G4

#### Vertebrates: 1

Typhlichthys subterraneus Southern cavefish G4

#### WARREN COUNTY

## \*Hubbard's Cave (WR 14)

#### **Location:**

**Description:** A large pit approximately 75 feet in diameter allows access to three separate passages as noted below. Although much of the entrance would require vertical gear to enter, at one point the vertical drop is less than 15 feet and a cable ladder sufficed for entry. In actuality the entrance bisects the passage into two separate caves: (1) West & north passages, and (2) South passage. Barr (1961) provided a detailed description, a map of the cave and an overview of the cave's rich history.

**Hubbard's Cave North:** Historically the west fork was the longest, entered by a slot in the wall that gives access to a narrow, winding passage for about 500 feet. The cave then becomes larger and averages 30-40 feet wide and 10-60 feet in height. As noted by Barr, this entire passage is "exceptionally dry and dusty, and a peculiar musty odor is prevalent throughout". The cave is indeed dusty, with bat guano peppered everywhere and presumably responsible for the odor.

The north passage is very large at the entrance, but drops to a crawlway within 175 feet. The twilight zone was damp.

**Hubbard's Cave South:** The south passage is also very large at the entrance and opens into a huge passage 40 feet wide by 300 feet long. Much leaf litter is present at the entrance jammed in the gate. A complex of upper and lower passages exists in this cave and exploration remains incomplete. The primary area pitfalled was a wet-weather stream that was rich in detritus.

# Species of management concern: 5

Carychium stygium Stygian carych G3
Pseudotremia undescribed species Barr's cave milliped G2
Scoterpes ventus cave milliped G3
Pseudosinella hirsuta Hirsute cave springtail G2
Myotis grisescens Gray bat G3

# Obligate subterranean species: 8

Carychium stygium Stygian carych G3

Phanetta subterranea Subterranean sheet-web spider G5

Tetracion tennesseensis Tennessee cave milliped G4

Pseudotremia undescribed species Barr's cave milliped G2

Scoterpes ventus cave milliped G3

Pseudosinella hirsuta Hirsute cave springtail G2

Pseudanophthalmus robustus Robust cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Myotis grisescens Gray bat G3

# \*Little Bat Cave (WR 18)

#### **Location:**

**Description:** This cave was described by Barr (1961). The entrance is gated and lies next to the road that approachs Hubbard's Cave. The cave consists of a streamless canyon.

#### **Species of management concern: 4**

<u>Pseudotremia</u> undescribed species Barr's cave millipede G2 <u>Scoterpes ventus</u> cave millipede G3 <u>Kleptochthonius barri</u> Barr's cave pseudoscorpion G2 <u>Pseudosinella christianseni</u> Christiansen's cave springtail G3

# Obligate subterranean species: 8

Phanetta subterranea Subterranean sheet-web spider G5
Kleptochthonius barri Barr's cave pseudoscorpion G2
Pseudotremia undescribed species Barr's cave millipede G2
Scoterpes ventus cave millipede G3
Tetracion tennesseensis Tennessee cave millipede G4
Pseudosinella christianseni Christiansen's cave springtail G3
Pseudanophthalmus robustus Robust cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Corynorhinus rafinesquii Rafinesque's big-eared bat G4

## \*Jaco Spring Cave (WR 317)

#### **Location:**

**Description:** This cave is entered via a large entrance next to the lake. The passage dimension decreases inside the entrance, but remains walking height. The visit to this cave was cut short due to the presence of Gray bats.

# **Species of management concern: 2**

Orconectes <u>australis</u> Southern cave crayfish G3 Myotis grisescens Gray bat G3

#### Obligate subterranean species: 5

<u>Caecidotea bicrenata</u> Two-toothed cave isopod G4
<u>Orconectes australis</u> Southern cave crayfish G3
<u>Phanetta subterranean</u> Subterranean sheet-web spider G5
<u>Tetracion tennesseensis</u> Tennessee cave millipede G4
<u>Spelobia tenebrarum</u> Cave dung fly G5

# Vertebrates: 1

Myotis grisescens Gray bat G3

## \*Joint Cave (WR 96)

#### Location:

**Description:** The entrance to this cave is in a small cliff. The entrance passage leads to a joint-controlled canyon.

## Species of management concern: 5

Kleptochthonius barri Barr's cave pseudoscorpion G2
Liocranoides archeri Archer's cave spider G2
Scoterpes ventus cave milliped G3
Pseudotremia sp. cave milliped G1/2

Pseudosinella christianseni Christiansen's cave springtail G3

## Obligate subterranean species: 10

Caecidotea bicrenata Two-toothed cave isopod G4

Miktoniscus barri Barr's cave isopod G3/4

Hesperochernes mirabilis Southeastern cave pseudoscorpion G4

Kleptochthonius barri Barr's cave pseudoscorpion G2

Liocranoides archeri Archer's cave spider G2

Phanetta subterranean Subterranean sheet-web spider G5

<u>Tetracion tennesseensis</u> Tennessee cave milliped G4

Scoterpes ventus cave milliped G3

Pseudotremia sp. cave milliped G1/2

Pseudosinella christianseni Christiansen's cave springtail G3

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 4

<u>Plethodon glutinosis</u> Slimy salamander G4 <u>Corynorhinus rafinesquii</u> Rafinesque's big-eared bat G3 <u>Pipistrellus subflavus</u> Eastern pipistrelle G5 <u>Neotoma magister</u> Eastern woodrat G4

#### \*Storage Cave (WR 102)

#### Location:

**Description:** This cave is entered via a pit-like joint that passes through the sandstone into the underlying limestone. The cave consists of a series of dry passages.

# Species of management concern: 4

Scoterpes ventus cave milliped G3

Pseudotremia sp. cave milliped G1/2

Arrhopalites undescribed species Storage cave springtail G1

Pseudosinella christianseni Christiansen's cave springtail G3

## Obligate subterranean species: 8

Phanetta subterranean Subterranean sheet-web spider G5

Hesperochernes mirabilis Southeastern cave pseudoscorpion G4

<u>Tetracion tennesseensis</u> Tennessee cave milliped G4

Scoterpes ventus cave milliped G3

Pseudotremia sp. cave milliped G1/2

Arrhopalites undescribed species Storage cave springtail G1

Pseudosinella christianseni Christiansen's cave springtail G3

Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 3

Plethodon glutinosis Slimy salamander G4

<u>Pipistrellus</u> <u>subflavus</u> Eastern pipistrelle G5

Neotoma magister Eastern woodrat G4

# \*Rocky River Cave (WR 25)

#### **Location:**

**Description:** This cave was described by Barr (1961) as having an entrance 50 feet wide by 15 feet high. The main passage of the cave is a large stream passage with multiple water falls.

# **Species of management concern: 4**

Orconectes australis Southern cave crayfish G3

Pseudotremia sp. cave milliped G1

Scoterpes ventus cave milliped G3

Pseudanophthalmus vanburenensis Vanburen cave beetle G1

## Obligate subterranean species: 8

Caecidotea bicrenata Two-toothed cave isopod G4

Orconectes australis Southern cave crayfish G3

Phanetta subterranean Subterranean sheet-web spider G5

Tetracion tennesseensis Tennessee cave milliped G4

Pseudotremia sp. cave milliped G1

Scoterpes ventus cave milliped G3

Pseudanophthalmus vanburenensis Vanburen cave beetle G1

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Plethodon dorsalis Zigzag salamander G4

## \*Smith Grove Cave #1 (WR 28)

#### Location:

**Description:** This cave was described by Matthews (1971) as the largest of several in the immediate vicinity. The cave is in the bottom of a sinkhole and consists of about 200 feet of streamless, walking height passage.

## **Species of management concern: 1**

Kleptochthonius undescribed species pseudoscorpion G1

# Obligate subterranean species: 2

<u>Tetracion tennesseensis</u> Tennessee cave milliped G4 Spelobia tenebrarum Cave dung fly G5

## Vertebrates: 3

<u>Plethodon dorsalis</u> Zigzag salamander G4 <u>Plethodon glutinosis</u> Slimy salamander G4 Pipistrellus subflavus Eastern pipistrelle G5

## **Cumberland Caverns (WR 7)**

#### Location

**Description:** This cave was not visited, but is listed here based on published records. The cave was described by Barr (1961) and is one of the most extensive in Tennessee. This cave undoubtedly has a more extensive fauna than indicated here.

## Species of management concern: 9

Stygobromus undescribed species Bosnak's cave amphipod G2
Orconectes australis Southern cave crayfish G3
Liocranoides tennesseensis Tennessee two-clawed spider G2
Phalangodes appalachius Appalachian cave harvestman G2
Pseudotremia acheron cave milliped G1
Litocampa undescribed species #4 cave dipluran G3

Arianops stygica cave ant beetle G1

<u>Pseudanophthalmus</u> <u>macradyi</u> Macrady's cave beetle G2

Pseudanophthalmus templetoni Templeton's cave beetle G2

## Obligate subterranean species: 9

Stygobromus undescribed species Bosnak's cave amphipod G2

Orconectes australis Southern cave crayfish G3

Hesperochernes mirabilis (Banks) TB/TP Eastern cave pseudoscorpion G4

Phalangodes appalachius Appalachian cave harvestman G2

Pseudotremia acheron cave milliped G1

Litocampa undescribed species #4 cave dipluran G3

Arianops stygica cave ant beetle G1

Pseudanophthalmus macradyi Macrady's cave beetle G2

Pseudanophthalmus templetoni Templeton's cave beetle G2

#### Vertebrates: 0

#### WHITE COUNTY

# Rose Cave (WH 36)

#### Location:

**Description:** The cave is marked as Rose Cave on Lonewood quadrangle, on Bee Creek at the base of Scott Pinnacle, about 0.4 mile south of the confluence with the Caney Fork. About 1,200 feet of stream passage was described by Barr (1961). A dry upper level connects a sinkhole entrance (adjacent to the main entrance) with the stream passage. The current mapped length of the cave, which occurs in the Monteagle Limestone, is 3,211 feet (Tennessee Cave Survey, 2002).

## Species of management concern: 3

Orconectes <u>australis</u> Southern cave crayfish G3 <u>Myotis grisescens</u> Gray bat G3

# Obligate subterranean species: 6

Caecidotea bicrenata Two-toothed cave isopod G4
Orconectes australis Southern cave crayfish G3
Tetracion tennesseensis Tennessee cave milliped G4
Phanetta subterranea Subterranean sheet-web spider G5
Spelobia tenebrarum Cave dung fly G5
Typhlichthys subterraneus Southern cavefish G4

#### **Vertebrates: 5**

<u>Typhlichthys</u> <u>subterraneus</u> Southern cavefish G4
<u>Ictalurus</u> sp. catfish
<u>Lepomis</u> sp. sunfish
<u>Myotis grisescens</u> Gray bat G3
<u>Pipistrellus subflavus</u> Eastern pipistrelle G5

#### **Ghost River Cave (WH 868)**

#### **Location:**

**Description:** This cave is a streamless passage that presently has about 4,000 feet of mapped or explored passages (Tennessee Cave Survey, 2002), but is expected to exceed a mile in length when completely explored (Walter, personal communication).

# **Species of management concern: 7**

Glyphalinea sp. terrestrial snail G1

Pseudosinella undescribed species -Undescribed cave springtail G1

Appaleptoneta sp. cave spider G1

Pseudosinella christianseni Christiansen's cave springtail G2

Pseudosinella hirsuta cave springtail G2

Scoterpes ventus Eastern Tennessee cave milliped G2

# Liocranoides sp. Two-clawed spider G2

# Obligate subterranean species: 9

<u>Glyphalinea</u> sp. terrestrial snail

Scoterpes ventus Eastern Tennessee cave milliped G3

Tetracion tennesseensis Tennessee cave milliped G4

Phanetta subterranea Subterranean sheet-web spider G5

Appaleptoneta sp cave spider

Hesperochernes mirabilis Southeastern cave pseudoscorpion G4

Pseudosinella christianseni Christiansen's cave springtail G2

Pseudosinella hirsuta cave springtail G2Pseudosinella undescribed species

## Vertebrates: 3

Plethodon glutinosis Slimy salamander G4

Eurycea lucifuga Cave salamander G4

Pipistrellus subflavus Eastern pipistrelle G5

## **Lost Creek Cave (WH 20)**

#### Location:

**Description:** The cave is marked as Dodson Cave on the Lonewood quadrangle, main entrance is in a large sinkhole on Little Chestnut Mountain about 4 miles west of Scott Gulf. Barr (1961) presented a map of about 3,000 feet of passage leading to a waterfall and a short section of stream passage. A total of 21,763 feet have now been mapped in the cave.

## **Species of management concern: 8**

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudanophthalmus undescribed species - Undescribed cave ground beetle G1

Aloconota diversiseta rove beetle G1

Sphalloplana percoeca cave flatworm G3

Stygobromus undescribed species - Undescribed amphipod crustacean G2

Scoterpes ventus Eastern Tennessee cave milliped G2

Litocampa undescribed species - Undescribed dipluran G2

Orconectes australis australis Southern cave crayfish G3

#### Obligate subterranean species: 10

Sphalloplana percoeca cave flatworm G3

Caecidotea bicrenata Two-toothed cave Isopod G4

Stygobromus undescribed species - Undescribed amphipod crustacean

Orconectes australis australis Southern cave crayfish G3

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Scoterpes ventus Eastern Tennessee cave milliped G3

Onychiurus sp. cave springtail

Litocampa undescribed species - Undescribed dipluran

Pseudanophthalmus undescribed species- Undescribed cave ground beetle G1

Spelobia tenebrarum Cave dung fly G5

Vertebrates: 1

Pipistrellus subflavus Eastern pipistrelle G5

# **Indian Cave (WH 17)**

#### **Location:**

**Description:** The cave is marked as Indian Cave on Doyle quadrangle, it is about a 2 ½ miles south of Doyle, on the west side of the road above the Reno Bridge. This site is well known due to the presence of petroglyphs on the walls (Barr, 1961). There is an estimated 3000 feet of stream and associated passage formed in the St. Louis Limestone (Tennessee Cave Survey, 2002).

# Species of management concern: 7

Glyphalinia sp. terrestrial snail G1

Pseudotremia sp. cave milliped G1

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudosinella undescribed species Undescribed cave springtail G1

Folsomia undescribed species near macrochaeta - undescribed springtail G1

Scoterpes ventus Eastern Tennessee cave milliped G3

Liocranoides sp. two-clawed spider G2

# Obligate subterranean species: 10

Glyphalinia sp. terrestrial snail

Caecidotea bicrenata Two-toothed cave isopod G4

Scoterpes ventus Eastern Tennessee cave milliped G3

Tetracion tennesseensis Tennessee cave milliped G4

Pseudotremia sp. cave milliped G1

Kleptochtonius daemonius McElroy cave pseudoscorpion G2

Pseudosinella undescribed species Undescribed cave springtail G1

Onychiurus sp. cave springtail

Pseudanophthalmus robustus Robust cave beetle G3/4

Spelobia tenebrarum Cave dung fly G5

#### Vertebrates: 1

Eurycea lucifuga Cave salamander G4

## Witt Cave (WH 844)

#### Location:

**Description:** This cave consists of a crawlway that leads to a walking height stream passage, estimated at 1,100 feet in length (Tennessee Cave Survey, 2002). The cave is formed in the St. Louis Limestone.

# Species of management concern: 2

<u>Kleptochtonius daemonius</u> McElroy cave pseudoscorpion G2 Orconectes australis Southern cave crayfish G3

# Obligate subterranean species: 5

Caecidotea bicrenata Two-toothed cave isopod G4
Orconectes australis Southern cave crayfish G3
Kleptochtonius daemonius McElroy cave pseudoscorpion G2
Pseudanophthalmus robustus Robust cave beetle G3/4
Spelobia tenebrarum Cave dung fly G5

## **Vertebrates: 1**

Eurycea lucifuga Cave salamander G4

# **SUMMARY OF RESULTS**

A total of 117 caves were sampled, distributed among the following counties: Bledsoe (1), Coffee (4), Cumberland (4), Fentress (15), Franklin (11), Grundy (12), Marion (11), Overton (14), Pickett (3), Rhea (2), Sequatchie (3), Van Buren (24), Warren (8) and White (5). The top faunal caves, rank-ordered by the number of obligate subterranean species (TB/SB) and species of high global rarity (G1-G3):

Cave	<u>G1-G3</u>	TB/SB
Rumbling Falls Cave System (Van Buren Co.)	13	19
Crystal Cave (Grundy Co.)	12	16
Cave Between Caves (Van Buren Co.)	12	16
Big Mouth Cave (Grundy Co.)	13	15
Dry Cave (Franklin Co.)	12	14
Bunkum Cave (Pickett Co.)	12	13
Skull Cave (Grundy Co.)	11	13
Dry Cave (Grundy Co.)	10	13
Camps Gulf Cave (Van Buren Co.)	8	13
Redbud Cave (Fentress Co.)	11	12
Aaron Tolletts Cave (Bledsoe Co.)	10	12
Little Slippery Slit Cave (Overton Co.)	8	12
Woodlee Cave (Grundy Co.)	7	12
Webb Cave (Overton Co.)	10	11
Trussell Cave (Grundy Co.)	9	11
Cornstarch Cave (Fentress Co.)	7	11
Caney Hollow Cave (Franklin Co.)	7	11
Mill Hollow Cave (Overton Co.)	7	11
Nickajack Cave (Overton Co.)	10	10
Keith Cave (Franklin Co.)	10	10
Laurel Creek Cave (Van Buren Co.)	8	10
Lost Creek Cave (White Co.)	8	10
Indian Cave (White Co.)	7	10
Joint Cave (Warren Co.)	5	10

A total of 138 species were assigned an ecological classification consistent with an obligate subterranean existence (i.e, troglobite, edaphobite or stygobite):

Sphalloplana percoeca cave flatworm

Carychium stygium Stygian carych

Helicodiscus hadenoceus cave disc snail

Helicodiscus barri Barr's terrestrial snail

Helicodiscus notius specus cave terrestrial snail

Glyphalinia undescribed species terrestrial snail

Glyphalinia sp. terrestrial snail

Diacyclops yeatmani Yeatman's groundwater copepod

Diacyclops indianensis Indiana groundwater copepod

Megacyclops donnaldsoni Donnaldson's cave copepod

Bryocamptus (Limocamptus) undescribed species copepod

Pseudocandona jeanneli Jeannel's groundwater ostracod

Pseudocandona undescribed species groundwater ostracod

Caecidotea bicrenata bicrenata Two-toothed cave isopod

Caecidotea nickajackensis Nickajack cave isopod

Caecidotea scyphus cave isopod

Caecidotea stygia Northern cave isopod

Caecidotea circulus Circular cave isopod

Crangonyx antennatus Appalachian cave amphipod

Stygobromus vitreus cave amphipod

Stygobromus exilis Hubricht cave amphipod

Stygobromus undescribed species 1 cave amphipod

Stygobromus undescribed species 2 Davis cave amphipod

Stygobromus undescribed species 3 Bosnak's cave amphipod

Stygobromus undescribed species 4 Southern cave amphipod

Stygobromus undescribed species 5 Dickson's cave amphipod

Orconectes australis australis Southern cave crayfish

Cambarus hamulatus cave crayfish

Appaleptoneta spp. leptonetid spider

Agyneta undescribed species Trussell cave sheet-web spider

Phanetta subterranea Subterranean sheet-web spider

Porrhomma cavernicola Cavernicolous sheet-web spider

Oreonetides undescribed species cave sheet-web spider

Anthrobia mammouthia Mammoth cave spider

Nesticus barri Barr's cave spider

Nesticus pecki Peck's cave spider

Nesticus stygius Stygian cave spider

Nesticus dilutus Grassy creek cave spider

Liocranoides archeri Archer's two-clawed spider

Kleptochthonius barri Barr's cave pseudoscorpion

Kleptochtonius daemonius McElroy cave pseudoscorpion

Kleptochthonius infernalis Infernal pseudoscorpion

Kleptochthonius pluto Pluto's cave pseudoscorpion

Kleptochthonius rex Bunkum Cave pseudoscorpion

Kleptochthonius stygius Stygian cave pseudoscorpion

Kleptochthonius tantalus cave pseudoscorpion

Kleptochthonius undescribed species Round Cove cave pseudoscorpion

Kleptochthonius undescribed species Sells cave pseudoscorpion

Kleptochthonius charon Muchmore cave pseudoscorpion

Apochthonius minor cave pseudoscorpion

Apochthonius undescribed species cave pseudoscorpion

Tyrannochthonius fiski Fisk's cave pseudoscorpion

<u>Tyrannochthonius</u> <u>halopotamus</u> Salt River cave pseudoscorpion

Tyrannochthonius steevesi Steeve's cave pseudoscorpion

Microcreagris nickajackensis Nickajack cave pseudoscorpion

Chitrella archeri Archer's cave pseudoscorpion

Phalangodes appalachius Appalachian cave harvestman

Phalangodes undescribed species cave harvestman

Pseudotremia acheron cave milliped

Pseudotremia minos Russell cave milliped

Pseudotremia rhabdamanthus cave milliped

Pseudotremia undescribed species 1 Wallace's cave milliped

Pseudotremia undescribed species 2 Mann's cave milliped

Pseudotremia undescribed species 3 Roebucks' cave milliped

Pseudotremia undescribed species 4 Garland's cave milliped

Pseudotremia undescribed species 5 Three Forks cave milliped

Pseudotremia undescribed species 6 Slippery slit cave milliped

Pseudotremia undescribed species 7 Barr's cave milliped

Pseudotremia undescribed species 8 Skylight cave milliped

Pseudotremia undescribed species 9 Holliday's cave milliped

Pseudotremia undescribed species 10 Baker cave milliped

Scoterpes copei Cope's cave milliped

Scoterpes ventus cave milliped

Scoterpes undescribed species cave milliped

Scoterpes undescribed species cave milliped

Tetracion tennesseensis Tennessee cave milliped

Tetracion jonesi Jone's cave milliped

Chaetaspis mollis cave milliped

Pseudosinella hirsuta Hirsute cave springtail

Pseudosinella orba springtail

Pseudosinella spinosa Spinose cave springtail

Pseudosinella christianseni Christiansen's cave springtail

Pseudosinella pecki Peck's cave springtail

Pseudosinella undescribed species #1 Undescribed cave springtail

Pseudosinella undescribed species #2 Undescribed cave springtail

Pseudosinella undescribed species near nata Undescribed cave springtail

Sinella cavernarum Cavernicolous springtail

Neanura undescribed species Undescribed springtail

Arrhopalites marshalli Marshall's cave springtail

Arrhopalites pavo cave springtail

Arrhopalites undescribed species 1 undescribed cave springtail

Arrhopalites undescribed species 2 near bimus undescribed cave springtail

Arrhopalites undescribed species 3 near benitus undescribed cave springtail

Arrhopalites undescribed species 4 near <u>lacuna</u> undescribed cave springtail

Tomocerus missus Relict cave springtail

Litocampa cookei Cooke's cave dipluran

Litocampa valentinei Valentine's cave dipluran

Litocampa undescribed species 1 undescribed cave dipluran

Litocampa undescribed species 2 undescribed cave dipluran

Litocampa undescribed species 3 undescribed cave dipluran

Litocampa undescribed species 4 undescribed cave dipluran

Anillinus undescribed species undescribed ground beetle

Anillinus undescribed species undescribed ground beetle

Darlingtonea kentuckensis Darlington cave beetle

Nelsonites walteri Walter's cave beetle

Pseudanophthalmus undescribed species Jim Creekcave ground beetle

Pseudanophthalmus undescribed species Caney Hollow cave ground beetle

Pseudanophthalmus humeralis cave beetle

Pseudanophthalmus nickajackensis Nickajack cave beetle

Pseudanophthalmus ventus cave beetle

Pseudanophthalmus undescribed species cave ground beetle

Pseudanophthalmus undescribed species Lost Creek Cave beetle

Pseudanophthalmus intermedius Intermediate cave beetle

Pseudanophthalmus macradvi Macradv's cave beetle

Pseudanophthalmus templetoni Templeton's cave beetle

Pseudanophthalmus vanburenensis Vanburen cave beetle

Pseudanophthalmus jonesi Jone's cave beetle

Pseudanophthalmus undescribed species Aaron Tolletts cave beetle

Pseudanophthalmus undescribed species Baker cave beetle

Pseudanophthalmus undescribed species Keyhole cave beetle

Pseudanophthalmus undescribed species Wilmoth cave beetle

Pseudanophthalmus undescribed species Sells cave ground beetle

Pseudanophthalmus beaklevi Beaklev's cave beetle

Pseudanophthalmus robustus Robust cave beetle

Pseudanophthalmus valentinei Valentine's cave beetle

Ptomaphagus chromolithus Paint Rock cave fungus beetle

Ptomaphagus fecundus Fecund cave fungus beetle

Ptomaphagus hatchi Hatch's cave fungus beetle

Arianops undescribed species cave ant beetle

Arianops stygica cave ant beetle

Batriasymmodes quisnamus cave ant beetle

Batriasymmodes spelaeus Spelean ant beetle

Batrisodes clypeospecus cave ant beetle

Batrisodes pannosus cave ant beetle

Subterrochus ferus cave ant beetle

Subterrochus undescribed species cave ant beetle

Spelobia tenebrarum Cave dung fly

Typhlichthys subterraneus Southern cavefish

Gyrinophilus palleucus Tennessee cave salamander

A total of 153 species of significant global rarity were found, including 90 species assigned as G1, 34 as G2, and 29 as G3.

## Global rank 1: 90 species

Pyrgulopsis ogmorphaphe Royal snail

Helicina undescribed species terrestrial snail

Glyphalinia undescribed species terrestrial snail

Glyphalinia sp. terrestrial snail

Diacyclops yeatmani Yeatman's groundwater copepod

Megacyclops donnaldsoni Donnaldson's cave copepod

Bryocamptus (Limocamptus) undescribed species copepod

Pseudocandona jeanneli Jeannel's groundwater ostracod

Pseudocandona undescribed species groundwater ostracod

Caecidotea scyphus cave isopod

Caecidotea circulus Circular cave isopod

Stygobromus undescribed species 1 cave amphipod

Appaleptoneta spp. leptonetid spider

Agyneta undescribed species Trussell cave sheet-web spider

Oreonetides undescribed species cave sheet-web spider

Nesticus pecki Peck's cave spider

Nesticus stygius Stygian cave spider

Nesticus dilutus Grassy creek cave spider

Kleptochthonius barri Barr's cave pseudoscorpion

Kleptochtonius daemonius McElroy cave pseudoscorpion

Kleptochthonius infernalis Infernal pseudoscorpion

Kleptochthonius pluto Pluto's cave pseudoscorpion

Kleptochthonius rex Bunkum Cave pseudoscorpion

Kleptochthonius stygius Stygian cave pseudoscorpion

Kleptochthonius tantalus cave pseudoscorpion

Kleptochthonius magnus cave pseudoscorpion

Kleptochthonius undescribed species Round Cove cave pseudoscorpion

Kleptochthonius undescribed species Sells cave pseudoscorpion

Kleptochthonius undescribed species pseudoscorpion

Kleptochthonius charon Muchmore cave pseudoscorpion

Apochthonius minor pseudoscorpion

Apochthonius undescribed species pseudoscorpion

Tyrannochthonius fiski Fisk's cave pseudoscorpion

Tyrannochthonius halopotamus Salt River cave pseudoscorpion

Tyrannochthonius steevesi Steeve's cave pseudoscorpion

Microcreagris nickajackensis Nickajack cave pseudoscorpion

Chitrella archeri Archer's cave pseudoscorpion

Theromaster undescribed species harvestman

Pseudotremia acheron cave milliped

Pseudotremia minos Russell cave milliped

Pseudotremia rhabdamanthus cave milliped

Pseudotremia undescribed species 1 Wallace's cave milliped

Pseudotremia undescribed species 2 Mann's cave milliped

Pseudotremia undescribed species 3 Roebucks' cave milliped

Pseudotremia undescribed species 4 Garland's cave milliped

Pseudotremia undescribed species 5 Three Forks cave milliped

Pseudotremia undescribed species 6 Slippery slit cave milliped

Pseudotremia undescribed species 8 Skylight cave milliped

Pseudotremia undescribed species 9 Holliday's cave milliped

Pseudotremia undescribed species 10 Baker cave milliped

Cleidogona undescribed species milliped

Scoterpes undescribed species cave milliped

Chaetaspis mollis cave milliped

Pseudosinella undescribed species #1 Undescribed cave springtail

Pseudosinella undescribed species #2 Undescribed cave springtail

Pseudosinella undescribed species near nata Undescribed cave springtail

Neanura undescribed species undescribed springtail

Folsomia undescribed species near macrochaeta undescribed springtail

Arrhopalites undescribed species 1 undescribed cave springtail

Arrhopalites undescribed species 2 near bimus undescribed cave springtail

Arrhopalites undescribed species 3 near benitus undescribed cave springtail

Arrhopalites undescribed species 4 near lacuna undescribed cave springtail

Ptenothrix quadrangularis springtail

Tomocerus undescribed species springtail

Litocampa undescribed species 1 undescribed cave dipluran

Litocampa undescribed species 2 undescribed cave dipluran

Litocampa undescribed species 3 undescribed cave dipluran

Podocampa undescribed species Undescribed edaphic dipluran

Anillinus undescribed species undescribed ground beetle

Anillinus undescribed species undescribed ground beetle

Pseudanophthalmus undescribed species Jim Creekcave ground beetle

Pseudanophthalmus undescribed species Caney Hollow cave ground beetle

Pseudanophthalmus humeralis cave beetle

Pseudanophthalmus nickajackensis Nickajack cave beetle

Pseudanophthalmus ventus Barr TB cave beetle

Pseudanophthalmus undescribed species cave ground beetle

Pseudanophthalmus undescribed species Lost Creek Cave beetle

Pseudanophthalmus vanburenensis Vanburen cave beetle

Pseudanophthalmus jonesi Jone's cave beetle

Pseudanophthalmus undescribed species Aaron Tolletts cave beetle

Pseudanophthalmus undescribed species Baker cave beetle

Pseudanophthalmus undescribed species Keyhole cave beetle

Pseudanophthalmus undescribed species Wilmoth cave beetle

Tomocerus undescribed species springtail

Ptomaphagus fecundus Fecund cave fungus beetle

Arianops undescribed species cave ant beetle

Arianops stygica cave ant beetle

Batrisodes clypeospecus cave ant beetle

Batrisodes pannosus cave ant beetle

Subterrochus undescribed species cave ant beetle

## Global rank 2: 34 species

Helicodiscus hadenoceus cave disc snail

Helicodiscus notius specus cave terrestrial snail

Triodopsis complanata terrestrial snail

Acanthocyclops parasensitivus copepod

Diacyclops indianensis Indiana groundwater copepod

Stygobromus undescribed species 3 Bosnak's cave amphipod

Stygobromus undescribed species 5 Dickson's cave amphipod

Cambarus hamulatus cave crayfish

Liocranoides tennesseensis Tennessee two-clawed spider

<u>Liocranoides archeri</u> Archer's two-clawed spider

Kleptochthonius barri Barr's cave pseudoscorpion

Kleptochtonius daemonius McElroy cave pseudoscorpion

Kleptochthonius pluto Pluto's cave pseudoscorpion

Phalangodes appalachius Appalachian cave harvestman

Phalangodes undescribed species cave harvestman

Pseudotremia undescribed species 7 Barr's cave milliped

Scoterpes undescribed species cave milliped

Arrhopalites marshalli Marshall's cave springtail

Arrhopalites pavo cave springtail

Litocampa valentinei Valentine's cave dipluran

Nelsonites walteri Walter's cave beetle

Pseudanophthalmus intermedius Intermediate cave beetle

Pseudanophthalmus macradyi Macrady's cave beetle

Pseudanophthalmus templetoni Templeton's cave beetle

Pseudanophthalmus undescribed species Sells cave ground beetle

Pseudosinella hirsuta Hirsute cave springtail

Pseudosinella orba springtail

Pseudosinella spinosa Spinose cave springtail

Pseudosinella christianseni Christiansen's cave springtail

Pseudosinella pecki Peck's cave springtail

Triacanthella copelandi Copeland's springtail

Tomocerus missus Relict cave springtail

Ptomaphagus chromolithus Paint Rock cave fungus beetle

Acrotrichis lucidula feather winged beetle

Myotis sodalis Indiana bat

## Global rank 3: 29 species

Sphalloplana percoeca cave flatworm

Carychium stygium Stygian carych

Helicodiscus barri Barr's terrestrial snail

Glyphalinia carolinensis terrestrial snail

Mesodon wetherbyi Wetherby's terrestrial snail

Caecidotea nickajackensis Nickajack cave isopod

Stygobromus vitreus cave amphipod

Stygobromus exilis Hubricht cave amphipod

Stygobromus undescribed species 2 Davis cave amphipod

Stygobromus undescribed species 4 Southern cave amphipod

Orconectes australis australis Southern cave crayfish

Anahita punctulata Southeastern wandering spider

Maymena ambita Minute cave spider

Porrhomma cavernicola Cavernicolous sheet-web spider

Anthrobia mammouthia Mammoth cave spider

Nesticus barri Barr's cave spider

Nesticus tennesseensis Tennessee cave spider

Scoterpes copei Cope's cave milliped

Scoterpes ventus cave milliped

<u>Darlingtonea</u> <u>kentuckensis</u> Darlington cave beetle

Litocampa cookei Cooke's cave dipluran

Litocampa valentinei Valentine's cave dipluran

<u>Litocampa</u> undescribed species 4 undescribed cave dipluran

Ptomaphagus hatchi Hatch's cave fungus beetle

Batriasymmodes quisnamus cave ant beetle

Batriasymmodes spelaeus Spelean ant beetle

Subterrochus ferus cave ant beetle

Gyrinophilus palleucus Tennessee cave salamander

Myotis grisescens Gray bat

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