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A CHECKLIST BY COUNTIES OF EARTHWORMS (OLIGOCHAETA: ACANTHODRILIDAE, KOMAREKIONIDAE, LUMBRICIDAE, MEGASCOLECIDAE AND SPARGANOPHILIDAE) IN TENNESSEE, USA.

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ABSTRACT

This checklist of the terrestrial Oligochaeta of the state of Tennessee, USA, is based on collections from 1800 collections sites from all 95 counties in the state. In total, 57 species representing 19 genera and five families (Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae and Sparganophilidae) are reported from the state. Thirty-three are considered native (endemic) to North America, the rest are European, Oriental or Pantropical introduced/exotic species. The most frequently collected species were: *Aporrectodea trapezoides* (94 counties), *Octolasion tyrtaeum* (91 counties), *Aporrectodea turgida* (86 counties), *Bimastos tumidus* (81 counties), *Diplocardia caroliniana* (69 counties), *Bimastos heimbürgeri* (64 counties), *Lumbricus rubellus* (56 counties), *Amyntas diffringens* (54 counties) and *Bimastos zeteki* (53 counties). The remaining 48 species were collected from fewer than 35 counties each, and 31 of them from fewer than ten counties each. There are 17 species which are reported from the state for the first time. Records of earthworms in the state of Tennessee are listed by county, and include the ecoregion(s) in which the county occurs, a map highlighting the location of each county in the state, and a list of species thus far reported from that county.

Key words: Tennessee, Oligochaeta, Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae, Sparganophilidae, earthworms, distribution, checklist, ecoregions, physiographic regions

RÉSUMÉ

Cet inventaire des oligochètes terrestres de l'état du Tennessee, É.-U., est basé sur 1800 sites d'échantillonnage répartis à travers l'ensemble des 95 comtés dans cet état. Au total, il y a 57 espèces rapportées, représentant 19 genres appartenant à cinq familles (Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae et Sparganophilidae). Trente-trois espèces sont considérées indigènes (endémiques) en Amérique du Nord; tous représentent des espèces exotiques introduites d'origine européenne, orientale ou pantropicale. Les espèces les plus fréquemment recueillies sont: *Aporrectodea trapezoides* (94 comtés), *Octolasion tyrtaeum* (91 comtés), *Aporrectodea turgida* (86 comtés), *Bimastos tumidus* (81 comtés), *Diplocardia caroliniana* (69 comtés), *Bimastos heimbürgeri* (64 comtés), *Lumbricus rubellus* (56 comtés), *Amyntas diffringens* (54 comtés) et *Bimastos zeteki* (53 comtés). Les 48 autres espèces ont chacune été collectées dans moins de 35 comtés, et 31 d'entre elles dans moins de dix comtés chacune. Dix-sept espèces sont signalées dans l'état pour la première fois. Les mentions de lombrics pour le Tennessee sont énumérées par comté et incluent les écorégions représentées par ces comtés, une carte localisant les comtés dans l'état et la liste des espèces répertoriées jusqu'à présent pour chaque comté.

Mots-clé: Tennessee, Oligochaeta, Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae, Sparganophilidae, vers de terre, répartition, inventaire, écorégions, régions physiographiques

RESUMEN

La presente lista de especies de Oligochaeta terrícola del estado de Tennessee, U.S.A., se basa en 1800 sitios de recolección en 95 condados del estado. Se reportaron 57 especies en el mismo representando 19 géneros y cinco familias (Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae y Sparganophilidae). Treinta y tres especies se consideran nativas (endémicas) para Norteamérica, todas son especies europeas, orientales o pantropicales (exóticas). Las especies recolectadas con mayor frecuencia fueron *Aporrectodea trapezoides* (94 condados), *Octolasion tyrtaeum* (91 condados), *Aporrectodea turgida* (86 condados), *Bimastos tumidus* (81 condados), *Diplocardia caroliniana* (69 condados), *Bimastos heimbürgeri* (64 condados), *Lumbricus rubellus* (56 condados), *Amyntas diffringens* (54 condados) y *Bimastos zeteki* (53 condados). Las 48 especies restantes se recogieron en menos de 35 sitios cada una, y 31 de ellas en menos de 10 condados cada una. Existen 17 especies que se reportan desde el estado por primera vez. Las lombrices de tierra reportadas en Tennessee se colocaron en una lista para el condado, e incluye la ecoregión(s) a la que pertenece el condado, un mapa señalando la posición de cada condado en el estado, y una lista de especies informadas hasta el momento.

Palabras clave: Tennessee, Oligochaeta, Acanthodrilidae, Eudrilidae, Komarekionidae, Lumbricidae, Megascolecidae, Sparganophilidae, lombrices de tierra, distribución, lista de especies, ecoregion(s), regiones fisiográficas

ZUSAMMENFASSUNG

Diese Checkliste von nachgewiesenen terrestrischen Oligochaeten beruht auf Sammlungen in allen der 95 Kreisen (Counties) des US Bundesstaates Tennessee. Insgesamt wurden 57 Arten in 19 Gattungen und fünf Familien (Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae und Sparganophilidae) festgelegt. Dreiunddreißig dieser Arten sind in Nord Amerika einheimisch (endemisch). Die übrigen Arten sind europäischen, asiatischen oder pantropischen Ursprungs. Die am häufigsten gemeldeten Arten waren *Aporrectodea trapezoides* (94 Kreisen), *Octolasion tyrtaeum* (91 Kreisen), *Aporrectodea turgida* (86 Kreisen), *Bimastos tumidus* (81 Kreisen), *Diplocardia caroliniana* (69 Kreisen), *Bimastos heimbürgeri* (64 Kreisen), *Lumbricus rubellus* (56 Kreisen), *Amyntas diffringens* (54 Kreisen) und *Bimastos zeteki* (53 Kreisen). Die übrigen 48 Arten kamen von weniger als 35 Kreisen vor, und 31 Arten von weniger als 10 Kreisen jeder. Es gibt 17 Arten, die vom Staat zum ersten Mal gemeldet werden. Die einzelnen Fundorte sind durch Kreis und Ökoregion beschrieben und auf einer Karte eingetragen. Außerdem sind die Arten auf Kreisebene zusammengestellt.

Schlüsselworte: Tennessee, Oligochaeta, Acanthodrilidae, Eudrilidae, Komarekionidae, Lumbricidae, Megascolecidae, Sparganophilidae, Regenwürmer, geografische Verteilung, Checkliste, Ökoregion, Physiographische Regionen

INTRODUCTION

The earthworms in Tennessee have been reported in five papers by individual families: Acanthodrilidae (Damoff and Reynolds, 2016), Komarekionidae (Reynolds, 1977b), Lumbricidae (Reynolds *et al.*, 1974; Reynolds, 1974), Megascolecidae (Reynolds, 1978) and Sparganophilidae (Reynolds, 1977a). Also as incidental reports in Gates (1959, 1972a, 1972b, 1973, 1974a, 1974b, 1974c, 1975, 1977a, 1977b, 1978, 1979, 1982) and Reynolds and Wetzel (2004, 2008, 2012). This paper also includes collections not previously reported by the author. This paper consolidates these records into one checklist. Additionally, the regional distribution for the Southeastern United States presented by Reynolds (2011) is further broken down to the county level.

The state of Tennessee comprises 95 counties (Fig. 1) and seven physiographic regions which were explained in Reynolds *et al.* (1974) (Fig. 2) and are repeated here to align with the previous parts of the Tennessee series of earthworms (Reynolds, 1974, 1977a, 1977b, 1978; Reynolds *et al.*, 1974). Recent checklists by this author have used ecoregions presented by Omerick (1987, 1995, 2004) (Fig. 3) and also summarized in the APPENDIX of this paper. There are eight ecoregions in Tennessee: 65 – Southeastern Plains, 66 – Blue Ridge, 67 – Ridge and Valley, 68 – Southwestern Appalachians, 69 – Central Appalachians, 71 – Interior Plateau, 73 – Mississippi Alluvial Plain, 74 – Mississippi Valley Loess Plains.

CHECKLIST

The counties and their abbreviations were first employed by Reynolds *et al.* (1974). The counties will be listed alphabetically and within each county, the

families, genera and species will also be listed alphabetically. The Physiographic Regions, Soil Groups and Forest Types are taken from Nelson and Zillgitt (1969) and were used in the first four papers on the earthworms of Tennessee (Reynolds, 1977a, 1977b, 1978) and Reynolds *et al.* (1974). Since then, the author has changed to using Ecoregions (Omerick, 1987, 1995, 2004).

Anderson Co.



Physiographic regions: Great Valley + Cumberland Plateau
Ecoregion: Ridge and Valley

Acanthodrilidae - some not yet identified.

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea tuberculata (Eisen, 1874)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Dendrobaena octaedra (Savigny, 1826)

Dendrodrilus rubidus (Savigny, 1826)

Eiseniella tetraedra (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Lumbricus terrestris Linnaeus, 1758

Octolasion cyaneum (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected

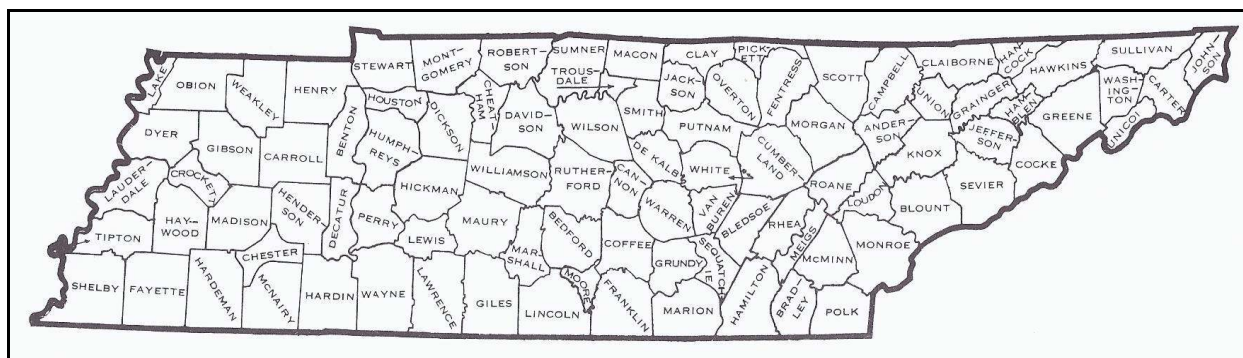


Fig. 1. The 95 counties in the state of Tennessee, USA (map by the author).

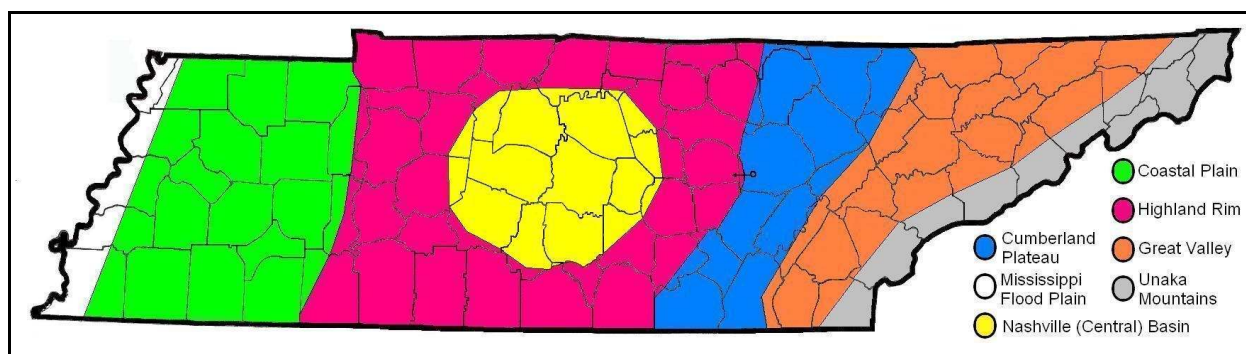


Fig. 2. The seven physiographic regions in Tennessee, USA based on Nelson and Zillgitt (1969) (map by the author).

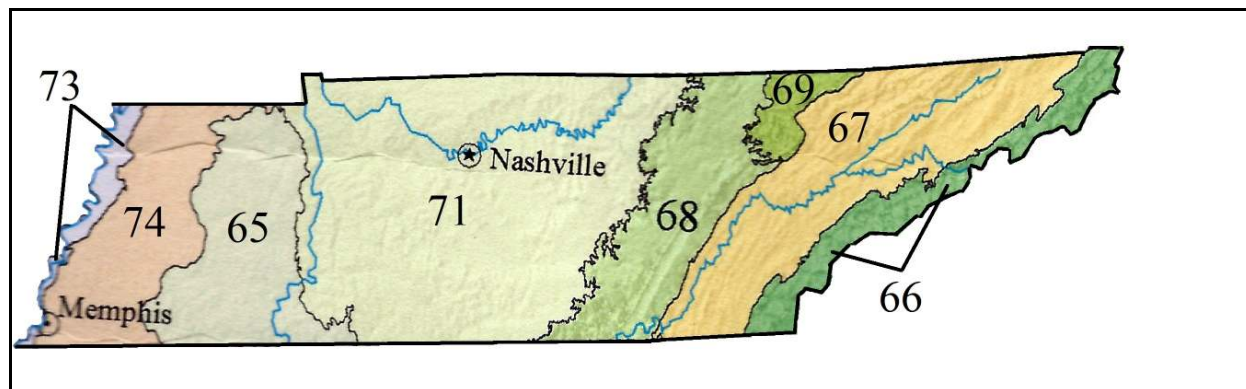
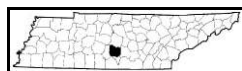


Fig. 3. The eight ecoregions in Tennessee, USA (modified from (Omernik, 1987, 1995, 2004).

Bedford Co.



Physiographic region:
Nashville (Central) Basin
Ecoregion: Interior Plateau

Acanthodrilidae

- Diplocardia caroliniana* Eisen, 1899
- Diplocardia eiseni* (Michaelsen, 1894)
- Diplocardia hulberti* James, 1988
- Diplocardia ornata* Gates, 1943
- Diplocardia rugosa* James, 1988
- Microscolex dubius* (Fletcher, 1887)

Komarekionidae - none collected.

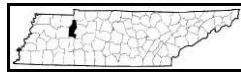
Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Dendrobaena octaedra (Savigny, 1826)
Eisenia foetida (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Benton Co.**Physiographic regions:**

Highland Rim + Coastal Plain

Ecoregions: Southeastern Plains + Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

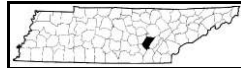
Eisenia foetida (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Bledsoe Co.**Physiographic region:**

Cumberland Plateau

Ecoregion: Southwestern Appalachians

Acanthodrilidae

Diplocardia alba Gates, 1943

Diplocardia caroliniana Eisen, 1899

Microscolex dubius (Fletcher, 1887)

Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Blount Co.**Physiographic regions:**

Unaka Mountains + Great Valley

Ecoregions: Blue Mountains + Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia singularis (Ude, 1893)

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea longa (Ude, 1885)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea tuberculata (Eisen, 1874)

Aporrectodea turgida (Eisen, 1873)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Dendrobaena octaedra (Savigny, 1826)

Dendrodrilus rubidus (Savigny, 1826)

Eisenia foetida (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Lumbricus terrestris Linnaeus, 1758

Octolasion cyaneum (Savigny, 1826)

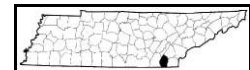
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Bradley Co.**Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley

Acanthodrilidae

Diplocardia varivesicula Murchie, 1966

Diplocardia udei Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea rosea (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea tuberculata (Eisen, 1874)

Aporrectodea turgida (Eisen, 1873)

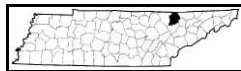
Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

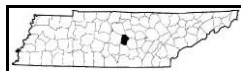
Bimastos tumidus (Eisen, 1874)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae*Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Campbell Co.****Physiographic regions:**

Great Valley + Cumberland Plateau

Ecoregion: Ridge and Valley**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrobaena octaedra* (Savigny, 1826)*Dendrodrilus rubidus* (Savigny, 1826)*Eisenia foetida* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Lumbricus terrestris* Linnaeus, 1758*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae***Sparganophilus eiseni* Smith, 1928**Cannon Co.****Physiographic region:**

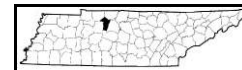
Nashville (Central) Basin

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos beddardi* (Michaelsen, 1894)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrodrilus rubidus* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Carroll Co.****Physiographic region:**

Coastal Plain

Ecoregion: Southeastern Plains**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos parvus* (Eisen, 1874)*Bimastos tumidus* (Eisen, 1874)*Dendrodrilus rubidus* (Savigny, 1826)*Eisenia foetida* (Savigny, 1826)*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas agrestis* (Goto & Hatai, 1899)*Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Carter Co.****Physiographic region:**

Unaka Mountains

Ecoregion: Blue Ridge**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Dendrobaena octaedra* (Savigny, 1826)*Dendrodrilus rubidus* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Lumbricus terrestris* Linnaeus, 1758*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Cheatham Co.****Physiographic regions:**

Nashville (Cent.) Basin + Highland Rim

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea tuberculata (Eisen, 1874)

Bimastos beddardi (Michaelsen, 1894)

Bimastos parvus (Eisen, 1874)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Chester Co.



Physiographic region: Coastal Plain

Ecoregion: Southeastern Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos gieseleri (Ude, 1895)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Eisenoides carolinensis (Michaelsen, 1910)

Octolasion tyrtaeum (Savigny, 1826)

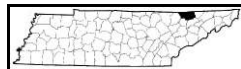
Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Claiborne Co.



Physiographic region:

Great Valley

Ecoregion: Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia ornata Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos tumidus (Eisen, 1874)

Dendrobaena octaedra (Savigny, 1826)

Dendrodrilus rubidus (Savigny, 1826)

Eisenia foetida (Savigny, 1826)

Eiseniella tetraedra (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Lumbricus terrestris Linnaeus, 1758

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Clay Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia ornata Gates, 1943

Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Dendrodrilus rubidus (Savigny, 1826)

Eiseniella tetraedra (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

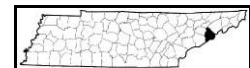
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Cocke Co.



Physiographic regions:

Unaka Mountains + Great Valley

Ecoregions: Blue Ridge + Ridge and Valley

Acanthodrilidae - some not yet identified.

Komarekionidae

Komarekiona eatoni Gates, 1974

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea rosea (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos parvus (Eisen, 1874)

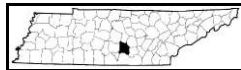
Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)
Dendrobaena octaedra (Savigny, 1826)
Dendrodrilus rubidus (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Lumbricus terrestris Linnaeus, 1758
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Coffee Co.**Physiographic regions:**

Nashville (Cent.) Basin + Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia michaelsoni Eisen, 1899

Diplocardia ornata Gates, 1943

Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

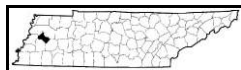
Dendrodrilus rubidus (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Sparganophilidae - none collected.

Crockett Co.**Physiographic region:**

Coastal Plain

Ecoregion: Southeastern Plains

Acanthodrilidae - some not yet identified.

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos palustris Moore, 1893

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected

Cumberland Co.**Physiographic region:**

Cumberland Plateau

Ecoregion: Southwestern Appalachians

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia macdowellii Murchie, 1967

Komarekionidae - none collected.

Lumbricidae

Aporrectodea rosea (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Dendrobaena octaedra (Savigny, 1826)

Dendrodrilus rubidus (Savigny, 1826)

Eisenoides carolinensis (Michaelson, 1910)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Davidson Co.**Physiographic region:**

Nashville (Central) Basin

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia hulberti James, 1988

Diplocardia ornata Gates, 1943

Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected

Lumbricidae

Aporrectodea rosea (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Dendrobaena octaedra (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Octolasion cyaneum (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

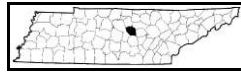
Amyntas hawayanus (Rosa, 1891)

Amyntas hupeiensis (Michaelson, 1895)

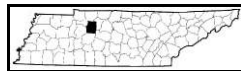
Sparganophilidae - none collected.

Decatur Co.**Physiographic regions:**

Highland Rim + Coastal Plain

Ecoregions: Southeastern Plains + Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943*Microscolex dubius* (Fletcher, 1887)*Microscolex phosphoreus* (Dugès, 1837)**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos beddardi* (Michaelsen, 1894)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos parvus* (Eisen, 1874)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**DeKalb Co.****Physiographic regions:**

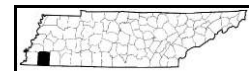
Nashville (Cent.) Basin + Highland Rim

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943*Microscolex phosphoreus* (Dugès, 1837)**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos parvus* (Eisen, 1874)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected**Sparganophilidae** - none collected**Dickson Co.****Physiographic regions:**

Nashville (Cent.) Basin+Highland Rim

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos parvus* (Eisen, 1874)*Dendrodrilus rubidus* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae***Sparganophilus eiseni* Smith, 1928**Dyer Co.****Physiographic regions:**

Mississippi Flood Plain + Coastal Plain

Ecoregions: Mississippi Alluvial Plain + Mississippi Valley
Loess Plains**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos tumidus* (Eisen, 1874)*Dendrodrilus rubidus* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)*Amyntas hupeiensis* (Michaelsen, 1895)**Sparganophilidae** - none collected.**Fayette Co.****Physiographic region:**

Coastal Plain

Ecoregion: Mississippi Valley Loess Plains**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia longiseta* Murchie, 1963**Komarekionidae** - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos beddardi (Michaelsen, 1894)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos parvus (Eisen, 1874)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Octolasion cyaneum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)
Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Fentress Co.**Physiographic region:**

Cumberland Plateau

Ecoregions: Ridge and Valley + Central Appalachians

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae

Komarekiona eatoni Gates, 1974

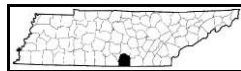
Lumbricidae

Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos beddardi (Michaelsen, 1894)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrodrilus rubidus (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Franklin Co.**Physiographic region:**

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Lumbricus rubellus Hoffmeister, 1843

Octolasion cyaneum (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Gibson Co.**Physiographic region:**

Coastal Plain

Ecoregions: Mississippi Valley Loess Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

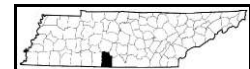
Allolobophora chlorotica (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos parvus (Eisen, 1874)
Bimastos tumidus (Eisen, 1874)
Eisenia foetida (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Amyntas morrisoni (Beddard, 1892)

Sparganophilidae - none collected.

Giles Co.**Physiographic region:**

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos beddardi (Michaelsen, 1894)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Lumbricus rubellus Hoffmeister, 1843
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

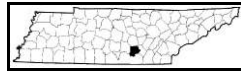
Sparganophilidae - none collected.

Grainger Co.**Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Microscolex dubius* (Fletcher, 1887)**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea tuberculata* (Eisen, 1874)*Aporrectodea turgida* (Eisen, 1873)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrobaena octaedra* (Savigny, 1826)*Eisenia foetida* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**Greene Co.****Physiographic regions:**

Unaka Mountains + Great Valley

Ecoregions: Blue Ridge + Ridge and Valley**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea tuberculata* (Eisen, 1874)*Aporrectodea turgida* (Eisen, 1873)*Bimastos tumidus* (Eisen, 1874)*Dendrobaena octaedra* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**Grundy Co.****Physiographic regions:**

Highland Rim + Cumberland Plateau

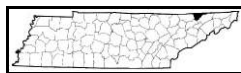
Ecoregions: Southwestern Appalachians + Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrodrilus rubidus* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**Hamblen Co.****Physiographic region:**

Great Valley

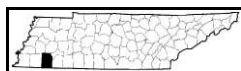
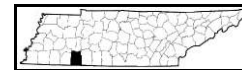
Ecoregion: Ridge and Valley**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos tumidus* (Eisen, 1874)*Dendrobaena octaedra* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected**Sparganophilidae** - none collected**Hamilton Co.****Physiographic regions:**

Great Valley + Cumberland Plateau

Ecoregions: Ridge and Valley + Southwestern Appalachians**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos tumidus* (Eisen, 1874)*Eisenia foetida* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)

Megascolecidae*Amyntas agrestis* (Goto & Hatai, 1899)*Amyntas diffringens* (Baird, 1869)*Amyntas hupeiensis* (Michaelsen, 1895)*Metaphire levis* (Goto & Hatai, 1899)**Sparganophilidae***Sparganophilus tennesseensis* Reynolds, 1977**Hancock Co.****Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrodrilus rubidus* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected**Hardeman Co.****Physiographic region:** Coastal Plain**Ecoregion:** Mississippi Valley Loess Plains**Acanthodrilidae***Diplocardia ornata* Gates, 1943**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos beddardi* (Michaelsen, 1894)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos parvus* (Eisen, 1874)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrobaena octaedra* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae***Sparganophilus eiseni* Smith, 1928**Hardin Co.****Physiographic regions:**

Highland Rim + Coastal Plain

Ecoregion: Southeastern Plains**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899 [5]*Diplocardia macdowellii* Murchie, 1967 [3]*Diplocardia michaelseni* Eisen, 1899 (1;*Diplocardia ornata* Gates, 1943 [4]**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Eisenia foetida* (Savigny, 1826)**Megascolecidae***Amyntas agrestis* (Goto & Hatai, 1899)*Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Hawkins Co.****Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia invecta* Gates, 1955*Microscolex dubius* (Fletcher, 1887)**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Lumbricus terrestris* Linnaeus, 1758*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Haywood Co.****Physiographic region:**

Coastal Plain

Ecoregion: Mississippi Valley Loess Plains**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected

Henderson Co.



Physiographic region:

Coastal Plain

Ecoregion: Mississippi Valley Loess Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Diplocardia longiseta Murchie, 1963
Diplocardia macdowellii Murchie, 1967
Diplocardia ornata Gates, 1943
Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

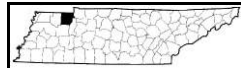
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos beddardi (Michaelson, 1894)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Dendrodrilus rubidus (Savigny, 1826)
Murchionia muldali (Omodeo, 1956)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Henry Co.



Physiographic region:

Coastal Plain

Ecoregion: Mississippi Valley Loess Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Eisenoides carolinensis (Michaelson, 1910)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Hickman Co.



Physiographic regions:

Nashville (Cent.) Basin+Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrodrilus rubidus (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Lumbricus terrestris Linnaeus, 1758
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Houston Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia invecta Gates, 1955

Diplocardia ornata Gates, 1943

Diplocardia sylvicola Gates, 1977

Microscolex phosphoreus (Dugès, 1837)

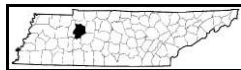
Komarekionidae - none collected

Lumbricidae

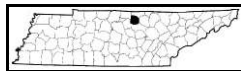
Aporrectodea turgida (Eisen, 1873)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos zeteki (Smith & Gittins, 1915)
Eisenoides carolinensis (Michaelson, 1910)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

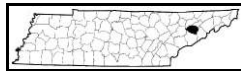
Sparganophilidae - none collected.

Humphreys Co.**Physiographic region:**

Highland Rim

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Allolobophoridella eiseni* (Levinsen, 1884)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea tuberculata* (Eisen, 1874)*Aporrectodea turgida* (Eisen, 1873)*Eisenia foetida* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**Jackson Co.****Physiographic region:**

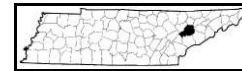
Highland Rim

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Microscolex dubius* (Fletcher, 1887)*Microscolex phosphoreus* (Dugès, 1837)**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea tuberculata* (Eisen, 1874)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Eiseniella tetraedra* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas agrestis* (Goto & Hatai, 1899)**Sparganophilidae** - none collected.**Jefferson Co.****Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley**Acanthodrilidae***Diplocardia invecta* Gates, 1955*Microscolex dubius* (Fletcher, 1887)*Microscolex phosphoreus* (Dugès, 1837)**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos tumidus* (Eisen, 1874)*Eisenia foetida* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Lumbricus terrestris* Linnaeus, 1758*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas hupeiensis* (Michaelsen, 1895)**Sparganophilidae** - none collected.**Johnson Co.****Physiographic region:**

Unaka Mountains

Ecoregion: Blue Ridge**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos tumidus* (Eisen, 1874)*Dendrobaena octaedra* (Savigny, 1826)*Dendrodrilus rubidus* (Savigny, 1826)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae***Sparganophilus eiseni* Smith, 1928**Knox Co.****Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia varivesicula* Murchie, 1966**Komarekionidae***Komarekiona eatoni* Gates, 1974**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)

Dendrodrilus rubidus (Savigny, 1826)
Eisenia foetida (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Lake Co.



Physiographic region:

Mississippi Flood Plain

Ecoregion: Mississippi Alluvial Plain

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia sylvicola Gates, 1977

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos parvus (Eisen, 1874)

Bimastos tumidus (Eisen, 1874)

Eiseniella tetraedra (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

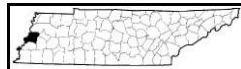
Megascolecidae

Amyntas diffringens (Baird, 1869)

Amyntas hupeiensis (Michaelsen, 1895)

Sparganophilidae - none collected.

Lauderdale Co.



Physiographic regions:

Mississippi Flood Plain + Coastal Plain

Ecoregions: Mississippi Alluvial Plain + Mississippi Valley
Loess Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia sylvicola Gates, 1977

Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Lawrence Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Eisenia foetida (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Lewis Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia invecta Gates, 1955

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Dendrodrilus rubidus (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Lincoln Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia sylvicola Gates, 1977

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

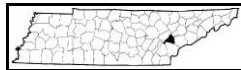
Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos parvus (Eisen, 1874)
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Loudon Co.**Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia invecta Gates, 1955

Diplocardia ornata Gates, 1943

Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea rosea (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

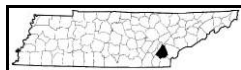
Eisenia foetida (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

McMinn Co.**Physiographic region:**

Great Valley

Ecoregion: Ridge and Valley

Acanthodrilidae

Diplocardia farmvillensis Gates, 1977

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos zeteki (Smith & Gittins, 1915)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

McNairy Co.**Physiographic region:**

Coastal Plain

Ecoregion: Mississippi Valley Loess Plains

Acanthodrilidae

Diplocardia macdowellii Murchie, 1967

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Eisenia foetida (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Macon Co.**Physiographic region:**

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia invecta Gates, 1955

Diplocardia ornata Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Bimastos heimbürgeri (Smith, 1928)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

Dendrodrilus rubidus (Savigny, 1826)

Eiseniella tetraedra (Savigny, 1826)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Madison Co.**Physiographic region:**

Coastal Plain

Ecoregion: Mississippi Valley Loess Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia smithi Macnab & McKey-Fender, 1955

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos parvus (Eisen, 1874)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrodrilus rubidus (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Marion Co.



Physiographic region:
 Cumberland Plateau
Ecoregion: Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

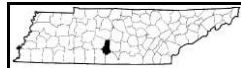
Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos tumidus (Eisen, 1874)
Eisenoides carolinensis (Michaelsen, 1910)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)
Amyntas diffringens (Baird, 1869)
Metaphire levis (Goto & Hatai, 1899)

Sparganophilidae - none collected.

Marshall Co.



Physiographic regions:
 Nashville (Cent.) Basin + Highland Rim
Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Diplocardia ornata Gates, 1943
Microscolex dubius (Fletcher, 1887)
Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Maury Co.



Physiographic regions:

Nashville (Cent.) Basin + Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae

Sparganophilus pearsei sarasotae Reynolds, 1980

Meigs Co.



Physiographic region:

Great Valley

Ecoregion: Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899 [1]

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)[1]
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Lumbricus rubellus Hoffmeister, 1843
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)
Amyntas hawayanus (Rosa, 1891)

Sparganophilidae - none collected.

Monroe Co.



Physiographic region:

Unaka Mountains + Great Valley

Ecoregions: Blue Ridge + Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia nova Gates, 1977

Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected.

Lumbricidae

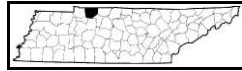
Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Lumbricus rubellus Hoffmeister, 1843
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)
Amyntas diffringens (Baird, 1869)
Amyntas hawayanus (Rosa, 1891)
Amyntas hilgendorfi (Michaelsen 1892)

Sparganophilidae - none collected.

Montgomery Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

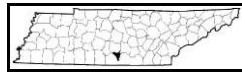
Lumbricidae

Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Dendrodrilus rubidus (Savigny, 1826)
Eisenia foetida (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Sparganophilidae - none collected.

Moore Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Diplocardia macdowellii Murchie, 1967
Diplocardia ornata Gates, 1943
Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrobaena octaedra (Savigny, 1826)
Dendrodrilus rubidus (Savigny, 1826)
Octolasion cyaneum (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Morgan Co.



Physiographic region:

Cumberland Plateau

Ecoregion: Central Appalachians

Acanthodrilidae

Diplocardia farmvillensis Gates, 1977

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos beddardi (Michaelsen, 1894)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrodrilus rubidus (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Obion Co.



Physiographic regions:

Mississippi Flood Plain + Coastal Plain

Ecoregions: Mississippi Alluvial Plain + Mississippi Valley
 Loess Plains

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia ornata Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos parvus (Eisen, 1874)

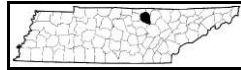
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrodrilus rubidus (Savigny, 1826)
Eiseniella tetraedra (Savigny, 1826)
Murchiona muldali (Omodeo, 1956)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)
Amyntas diffringens (Baird, 1869)

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Overton Co.**Physiographic regions:**

Highland Rim + Cumberland Plateau

Ecoregions: Southwestern Appalachians + Central Appalachians

Acanthodrilidae

Diplocardia macdowellii Murchie, 1967

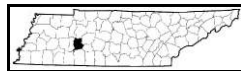
Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Perry Co.**Physiographic region:**

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Diplocardia ornata Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Eisenoides carolinensis (Michaelsen, 1910)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Pickett Co.**Physiographic regions:**

Cumberland Plateau + Great Valley

Ecoregions: Ridge and Valley + Central Appalachians

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia invecta Gates, 1955

Diplocardia sylvicola Gates, 1977

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos zeteki (Smith & Gittins, 1915)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Polk Co.**Physiographic regions:**

Unaka Mountains + Great Valley

Ecoregions: Blue Ridge + Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)

Dendrobaena octaedra (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

Lumbricus terrestris Linnaeus, 1758

Octolasion tyrtaeum (Savigny, 1826)

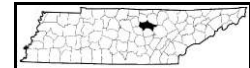
Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)

Amyntas diffringens (Baird, 1869)

Sparganophilidae

Sparganophilus tennesseensis Reynolds, 1977

Putnam Co.**Physiographic region:**

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Diplocardia ornata Gates, 1943

Microscolex dubius (Fletcher, 1887)

Microscolex phosphoreus (Dugès, 1837)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Dendrobaena octaedra (Savigny, 1826)
Dendrodrilus rubidus (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Rhea Co.



Physiographic region:

Cumberland Plateau

Ecoregion: Southwestern Appalachians

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Diplocardia gatesi Murchie, 1965
Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected.

Lumbricidae

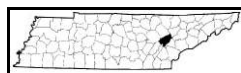
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Dendrobaena octaedra (Savigny, 1826)
Dendrodrilus rubidus (Savigny, 1826)
Eisenia foetida (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas diffringens (Baird, 1869)

Sparganophilidae - none collected.

Roane Co.



Physiographic regions:

Great Valley + Cumberland Plateau

Ecoregions: Ridge and Valley + Central Appalachians

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899 [1]
Diplocardia hulberti James, 1988 [1]
Diplocardia ornata Gates, 1943 [1]
Diplocardia sylvicola Gates, 1977 [2]
Diplocardia udei Eisen, 1899 [1]

Komarekionidae - none collected.

Lumbricidae

Aporrectodea longa (Ude, 1885) [2]
Aporrectodea trapezoides (Dugès, 1828) [4]
Aporrectodea tuberculata (Eisen, 1874) [1]
Aporrectodea turgida (Eisen, 1873) [12]
Bimastos heimbürgeri (Smith, 1928) [3]
Bimastos zeteki (Smith & Gittins, 1915) [2]
Dendrobaena octaedra (Savigny, 1826) [2]
Dendrodrilus rubidus (Savigny, 1826) [1]
Lumbricus rubellus Hoffmeister, 1843 [6]
Lumbricus terrestris Linnaeus, 1758 [1]
Octolasion cyaneum (Savigny, 1826) [1]
Octolasion tyrtaeum (Savigny, 1826) [7]

Megascolecidae

Amyntas diffringens (Baird, 1869) [1]

Amyntas hupeiensis (Michaelsen, 1895) [1]

Sparganophilidae - none collected.

Robertson Co.



Physiographic region:

Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899
Diplocardia invecta Gates, 1955
Diplocardia ornata Gates, 1943

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos parvus (Eisen, 1874)
Eiseniella tetraedra (Savigny, 1826)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Rutherford Co.



Physiographic region:

Nashville (Central) Basin

Ecoregion: Interior Plateau

Acanthodrilidae - some not yet identified.

Komarekionidae

Diplocardia caroliniana Eisen, 1899
Diplocardia ornata Gates, 1943

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

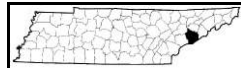
Sparganophilidae - none collected.

Scott Co.**Physiographic region:**

Cumberland Plateau

Ecoregion: Central Appalachians**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae***Komarekiona eatoni* Gates, 1974**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos zeteki* (Smith & Gittins, 1915)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae***Sparganophilus eiseni* Smith, 1928**Sequatchie Co.****Physiographic region:**

Cumberland Plateau

Ecoregion: Southwestern Appalachians**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea tuberculata* (Eisen, 1874)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos tumidus* (Eisen, 1874)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Sevier Co.****Physiographic regions:**

Unaka Mountains + Great Valley

Ecoregions: Blue Ridge + Ridge and Valley**Acanthodrilidae***Diplocardia alabama* Gates, 1977*Diplocardia caroliniana* Eisen, 1899*Diplocardia hulberti* James, 1988*Diplocardia ornata* Gates, 1943**Komarekionidae** - none collected.**Lumbricidae***Allolobophora chlorotica* (Savigny, 1826)*Aporrectodea rosea* (Savigny, 1826)*Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos beddardi* (Michaelsen, 1894)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Dendrobaena octaedra* (Savigny, 1826)*Eisenoides carolinensis* (Michaelsen, 1910)*Eisenoides lönnbergi* (Michaelsen, 1894)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas agrestis* (Goto & Hatai, 1899)*Amyntas diffringens* (Baird, 1869)**Sparganophilidae***Sparganophilus eiseni* Smith, 1928**Shelby Co.****Physiographic regions:**

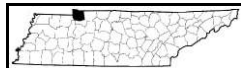
Mississippi Flood Plain + Coastal Plain

Ecoregions: Mississippi Alluvial Plain + Mississippi Valley
Loess Plains**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Bimastos tumidus* (Eisen, 1874)*Dendrobaena octaedra* (Savigny, 1826)*Eiseniella tetraedra* (Savigny, 1826)*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)*Amyntas hupeiensis* (Michaelsen, 1895)**Sparganophilidae** - none collected.**Smith Co.****Physiographic regions:**

Nashville (Cent.) Basin + Highland Rim

Ecoregio: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899*Diplocardia ornata* Gates, 1943*Diplocardia sylvicola* Gates, 1977*Microscolex phosphoreus* (Dugès, 1837)**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)

Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Eiseniella tetraedra (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Stewart Co.

Physiographic region:
 Highland Rim
Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

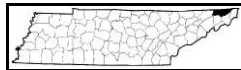
Bimastos palustris Moore, 1893

Bimastos zeteki (Smith & Gittins, 1915)

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Sullivan Co.

Physiographic regions:
 Unaka Mountains + Great Valley
Ecoregions: Blue Ridge + Ridge and Valley

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Allolobophora chlorotica (Savigny, 1826)

Aporrectodea rosea (Savigny, 1826)

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Dendrobaena octaedra (Savigny, 1826)

Dendrodrilus rubidus (Savigny, 1826)

Eiseniella tetraedra (Savigny, 1826)

Lumbricus rubellus Hoffmeister, 1843

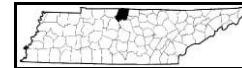
Lumbricus terrestris Linnaeus, 1758

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae

Sparganophilus eiseni Smith, 1928

Sumner Co.**Physiographic regions:**

Nashville (Cent.) Basin + Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae

Diplocardia caroliniana Eisen, 1899

Microscolex dubius (Fletcher, 1887)

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos heimbürgeri (Smith, 1928)

Bimastos tumidus (Eisen, 1874)

Lumbricus rubellus Hoffmeister, 1843

Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae - none collected.

Sparganophilidae - none collected.

Tipton Co.**Physiographic regions:**

Mississippi Flood Plain + Coastal Plain

Ecoregions: Mississippi Alluvial Plain + Mississippi Valley
 Loess Plains

Acanthodrilidae - some not yet identified.

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Aporrectodea turgida (Eisen, 1873)

Bimastos beddardi (Michaelsen, 1894)

Bimastos longicinctus (Smith & Gittins, 1915)

Bimastos tumidus (Eisen, 1874)

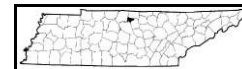
Octolasion tyrtaeum (Savigny, 1826)

Megascolecidae

Amyntas agrestis (Goto & Hatai, 1899)

Amyntas hupeiensis (Michaelsen, 1895)

Sparganophilidae - none collected.

Trousdale Co.**Physiographic regions:**

Nashville (Cent.) Basin+Highland Rim

Ecoregion: Interior Plateau

Acanthodrilidae - some not yet identified.

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)

Bimastos tumidus (Eisen, 1874)

Bimastos zeteki (Smith & Gittins, 1915)
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Unicoi Co.



Physiographic region:
 Unaka Mountains
Ecoregion: Blue Ridge

Acanthodrilidae - some not yet identified.
Komarekionidae - none collected.
Lumbricidae

Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Dendrobaena octaedra (Savigny, 1826)
Dendrodrilus rubidus (Savigny, 1826)
Eisenia foetida (Savigny, 1826)
Eiseniella tetraedra (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Union Co.

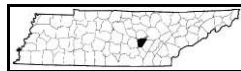


Physiographic region:
 Great Valley
Ecoregion: Ridge and Valley

Acanthodrilidae - some not yet identified.
Komarekionidae - none collected.
Lumbricidae

Aporrectodea rosea (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea tuberculata (Eisen, 1874)
Aporrectodea turgida (Eisen, 1873)
Bimastos heimbürgeri (Smith, 1928)
Bimastos tumidus (Eisen, 1874)
Eiseniella tetraedra (Savigny, 1826)
Lumbricus rubellus Hoffmeister, 1843
Lumbricus terrestris Linnaeus, 1758
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Van Buren Co.



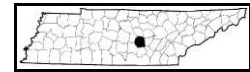
Physiographic region:
 Highland Rim
Ecoregion: Interior Plateau

Acanthodrilidae - some not yet identified.
Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Warren Co.



Physiographic regions:
 Nashville (Cent.) Basin + Highland Rim
Ecoregions: Southwestern Appalachians + Interior Plateau

Acanthodrilidae

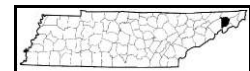
Diplocardia caroliniana Eisen, 1899

Komarekionidae - none collected.

Lumbricidae

Aporrectodea trapezoides (Dugès, 1828)
Bimastos heimbürgeri (Smith, 1928)
Bimastos longicinctus (Smith & Gittins, 1915)
Bimastos tumidus (Eisen, 1874)
Bimastos zeteki (Smith & Gittins, 1915)
Eisenoides carolinensis (Michaelsen, 1910)
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Washington Co.



Physiographic regions:
 Unaka Mountains + Great Valley
Ecoregions: Blue Ridge + Ridge and Valley

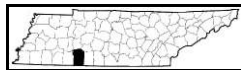
Acanthodrilidae

Diplocardia hulberti James, 1988

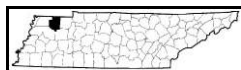
Komarekionidae - none collected.

Lumbricidae

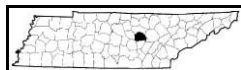
Allolobophora chlorotica (Savigny, 1826)
Aporrectodea trapezoides (Dugès, 1828)
Aporrectodea turgida (Eisen, 1873)
Lumbricus rubellus Hoffmeister, 1843
Octolasion tyrtaeum (Savigny, 1826)
Megascolecidae - none collected.
Sparganophilidae - none collected.

Wayne Co.**Physiographic region:**

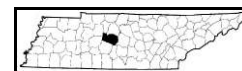
Highland Rim

Ecoregion: Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Dendrodrilus rubidus* (Savigny, 1826)*Eisenia foetida* (Savigny, 1826)*Eisenoides carolinensis* (Michaelsen, 1910)*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)]**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Weakley Co.****Physiographic region:**

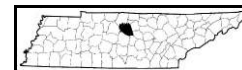
Coastal Plain

Ecoregion: Mississippi Valley Loess Plains**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos longicinctus* (Smith & Gittins, 1915)*Bimastos parvus* (Eisen, 1874)*Bimastos tumidus* (Eisen, 1874)*Bimastos zeteki* (Smith & Gittins, 1915)*Eisenoides carolinensis* (Michaelsen, 1910)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**White Co.****Physiographic regions:**

Highland Rim + Cumberland Plateau

Ecoregions: Southwestern Appalachians + Interior Plateau**Acanthodrilidae***Diplocardia caroliniana* Eisen, 1899**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos tumidus* (Eisen, 1874)*Dendrodrilus rubidus* (Savigny, 1826)*Octolasion cyaneum* (Savigny, 1826)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**Williamson Co.****Physiographic region:**

Nashville (Central) Basin

Ecoregion: Interior Plateau**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos tumidus* (Eisen, 1874)*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae***Amyntas diffringens* (Baird, 1869)**Sparganophilidae** - none collected.**Wilson Co.****Physiographic region:**

Nashville (Central) Basin

Ecoregion: Interior Plateau**Acanthodrilidae** - some not yet identified.**Komarekionidae** - none collected.**Lumbricidae***Aporrectodea trapezoides* (Dugès, 1828)*Aporrectodea turgida* (Eisen, 1873)*Bimastos heimbürgeri* (Smith, 1928)*Bimastos tumidus* (Eisen, 1874)*Lumbricus rubellus* Hoffmeister, 1843*Octolasion tyrtaeum* (Savigny, 1826)**Megascolecidae** - none collected.**Sparganophilidae** - none collected.**DISCUSSION**

This checklist of earthworms in the American state of Tennessee is based on collections from all 95 counties in the state. In total, 57 taxa representing 19 genera in five families, Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae and Sparganophilidae, are now known to occur in the state. Of these 57

taxa, 33 are considered native to North America; all remaining are introduced (exotic) European (16), Oriental (6) or Pantropical (2) species (Table 1). This is similar to other southeastern American states, where 50% or more of the species present in the state are native (endemic) species (see Reynolds, 2014a, b, c; Reynolds, 2015a, b, c, d).

The availability of diverse habitats greatly influences the number of species collected from any given site. Species such as *Allolobophora chlorotica*, *Eiseniella tetraedra* and *Sparganophilus eiseni* are likely to be collected only from wet soils and other substrates associated with lotic and lentic habitats (e.g., streams, ponds, lakes, wetlands, springs, and low lying areas that retain water for periods of time). Tennessee has ample habitat for these species. I collected in many such habitats, although *Allolobophora chlorotica* was only obtained in 20 counties. With the exception of Virginia and North Carolina where it was collected in 49 and 22 counties, respectively (Reynolds, 2015b, 2015e), Tennessee had considerably more counties where *Allolobophora chlorotica* was present than in the adjacent states due to greater sampling intensity: Kentucky (12 counties), Missouri (7 counties), Georgia (3 counties), Arkansas (1 county), while Alabama and Mississippi recorded no *Allolobophora chlorotica* (Reynolds, 2016, 2015a, 2015f, 2014, 2015c and 2015d, respectively).

Eiseniella tetraedra is another species which requires considerable moisture and sometimes is found on stream bottoms. In Tennessee it was recorded from 21 counties. Again it was only in Virginia (Reynolds, 2015b) where it was more prevalent than in Tennessee with it recorded in 27 counties. In all other adjacent states this species was recorded in fewer counties, i.e., North Carolina (14 counties), Missouri (11 counties), Kentucky (4 counties), Arkansas (3 counties), Georgia (2 counties) and again no collections in Alabama and Mississippi (Reynolds, 2015e, 2015a, 2014, 2015f, 2015c, 2015d, respectively).

The species in the genus *Sparganophilus* are often referred to as limicolous. They live in saturated soils or sometimes off shore under water. *Sparganophilus eiseni* is the most widespread species in this genus in North America and in the southeastern states there may be additional species in the genus present as well. In Tennessee, *S. eiseni* was collected in 10 counties while there were limited collections of *S. tennesseensis* and *S. pearsei sarasotae*. North Carolina has the greatest diversity of species in this genus, where *S. eiseni* was obtained in 11 counties and additional species of *S. gatesi*, *S. helenae*, *S. kristinae*, *S. pearsei*,

Table 1. Frequency of earthworm species, in the state of Tennessee, presented in decreasing order based on specimens from all 95 counties in the state.

Species†	No. of counties where present
<i>Aporrectodea trapezoides</i> - E	94
<i>Octolasion tyrtaeum</i> - E	91
<i>Aporrectodea turgida</i> - E	86
<i>Bimastos tumidus</i>	81
<i>Diplocardia caroliniana</i>	69
<i>Bimastos heimbürgeri</i>	64
<i>Lumbricus rubellus</i> - E	56
¹ <i>Amyntas diffringens</i> - O	54
<i>Bimastos zeteki</i>	53
<i>Dendrodrilus rubidus</i> - E	34
<i>Diplocardia ornata</i>	27
<i>Dendrobaena octaedra</i> - E	23
<i>Eiseniella tetraedra</i> - E	21
<i>Octolasion cyaneum</i> - E	21
<i>Allolobophora chlorotica</i> - E	20
<i>Aporrectodea rosea</i> - E	20
<i>Eisenia foetida</i> - E	20
<i>Microsclex dubius</i> - P	16
<i>Bimastos parvus</i>	15
<i>Amyntas agrestis</i> - O	14
<i>Lumbricus terrestris</i> - E	13
<i>Bimastos beddardi</i>	11
<i>Aporrectodea tuberculata</i> - E	10
<i>Eisenoides carolinensis</i>	10
<i>Microsclex phosphoreus</i> - P	11
² <i>Sparganophilus eiseni</i>	10
<i>Amyntas hupeiensis</i> - O	8
<i>Diplocardia invecta</i>	8
<i>Diplocardia sylvicola</i>	7
<i>Diplocardia hulberti</i>	5
<i>Diplocardia michaelsoni</i>	4
<i>Komarekiona eatoni</i>	4
¹ <i>Amyntas hawayanus</i> - O	3
<i>Allolobophoridella eiseni</i> - E	2
<i>Aporrectodea longa</i> - E	2
<i>Bimastos palustris</i>	2
<i>Diplocardia farmvillensis</i>	2
<i>Diplocardia macdowellii</i>	2
<i>Diplocardia udei</i>	2
<i>Diplocardia varivesicula</i>	2
<i>Metaphire levis</i> - O	2
<i>Murchiona muldali</i> - E	2
<i>Sparganophilus tennesseensis</i>	2
<i>Amyntas hilgendorfi</i> - O	1
<i>Bimastos gieseleri</i>	1
<i>Bimastos longicinctus</i>	1
<i>Diplocardia alba</i>	1
<i>Diplocardia alabamana</i>	1
<i>Diplocardia eiseni</i>	1
<i>Diplocardia gatesi</i>	1
<i>Diplocardia longiseta</i>	1
<i>Diplocardia nova</i>	1
<i>Diplocardia rugosa</i>	1
<i>Diplocardia singularis</i>	1
<i>Diplocardia smithi</i>	1
<i>Eisenoides lönnbergi</i>	1
<i>Sparganophilus pearsei sarasotae</i>	1
<i>Diplocardia</i> n. sp.	3

† Species in **bold** = considered native to North America; E = European introduction; O = Oriental introduction; P = Pantropical introduction; ¹ see Kinberg (1867); ² see Benham (1892).

and *S. tennesseensis* (Reynolds, 2015c) Georgia has nine counties with *S. eiseni* as well as limited collections of *S. komareki* and *S. pearsei* (Reynolds, 2015f). Alabama recorded *S. eiseni* in 10 counties but no additional species (Reynolds, 2015c). Mississippi recorded *S. eiseni* in eight counties as well as the type locality for *S. meansi* (Reynolds, 2015d). Arkansas and Kentucky recorded *S. eiseni* in three counties each and Missouri in two counties with no additional species (Reynolds, 2014, 2016 and 2015a, respectively). Virginia recorded *S. eiseni* in one county and *S. kristinae* and *S. pearsei* in one county each as well (Reynolds, 2015b).

There are 17 taxa which are reported from Tennessee for the first time: *Diplocardia alba*, *D. alabamiana*, *D. caroliniana*, *D. eiseni*, *D. farmvillensis*, *D. gatesi*, *D. hulberti*, *D. invecta*, *D. longiseta*, *D. macdowellii*, *D. nova*, *D. rugosa*, *D. smithi*, *D. sylvicola*, *D. varivesicula*, *Microscolex phosphoreus* and *Sparganophilus pearsei* ss. *sarasotae*.

There are at least two species new to science in the genus *Diplocardia* which have yet to be published in the literature from Bledsoe, Rhea and Sevier Counties. This is a more difficult genus to describe, but it is planned that these will appear in a journal paper within two years (Damoff and Reynolds, 2016/7).

There are over 1800 collections sites in Tennessee covering all 95 counties. Additional sampling focussed in areas adjacent to lotic and lentic habitats – would certainly broaden our knowledge of the distribution and diversity of the earthworm species occurring in the state of Tennessee.

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LITERATURE CITED

- Generic and species names in brackets that follow citations, below, reflect current nomenclature for those taxa, and thus may be different than nomenclature assigned in the original descriptions (Reynolds and Wetzel, 2015).
- Baird, W. 1869. Description of a new species of earthworm (*Megascolex diffringens*) found in north Wales. Proc. Biol. Soc. London, 1869: 40-43. [*Amyntas diffringens* n. sp. (= *Amyntas corticis*)]
- Benham, W.B. 1892. A new English genus of aquatic Oligochaeta (*Sparganophilus*) belonging to the family Rhinodrilidae. Quart. J. Microsc. Sci. (n.s.), 34: 155-179. [*Sparganophilus* n. gen., *Sparganophilus tamesis* n. sp. (= *Sparganophilus eiseni*)]
- Damoff, G.D. and J.W. Reynolds. 2016/7. Earthworms of Tennessee. V. Acanthodrilidae. Megadriologica (in prep.).
- Dugès, A. 1828. Recherche sur la circulation, la respiration et la reproduction des Annélides abranchez sétigères. Ann. Sci. Nat. 15(1): 284-336. [*Aporrectodea trapezoides* n. sp.]
- Dugès, A. 1837. Nouvelles observations sur la zoologie et l'anatomie des Annélides abranchez sétigères. Ann. Sci. Nat., ser. 2, Zool. 8: 15-35. [*Microscolex phosphoreus* n. sp.]
- Eisen, G. 1873. Om Skandinaviens Oligochaeter. Öfv. Vet-Akad. Förh. Stockholm 30(8): 43-56. [*Aporrectodea turgida* n. sp.]
- Dugès, A. 1837. Nouvelles observations sur la zoologie et l'anatomie des Annélides abranchez sétigères. Ann. Sci. Nat., ser. 2, Zool. 8: 15-35. [*Microscolex phosphoreus* n. sp.]
- Eisen, G. 1874. New Englands och Canadas Lumbricider. Öfv. Vet-Akad. Förh. Stockholm 31(2): 41-49. [*Aporrectodea tuberculata* n. sp., *Bimastos parvus* n. sp. and *Bimastos tumidus* n. sp.]
- Eisen, G. 1899. Notes on North-American earthworms of the genus *Diplocardia*. Zool. Bull. 2(4): 161-172. [*Diplocardia caroliniana* n. sp., *Diplocardia michaelseni* n. sp. and *Diplocardia udei* n. sp.]

- Fletcher, J.J. 1887. Notes on Australian earthworms. Part 3. Proc. Linn. Soc. New South Wales 2: 375-404. [*Microscolex dubius* n. sp.]
- Gates, G.E. 1943. On some American and Oriental earthworms. Ohio J. Sci. 43(3): 87-116. [*Diplocardia alba* n. sp. and *Diplocardia ornata* n. sp.]
- Gates, G.E. 1955. Notes on several species of the earthworm genus *Diplocardia* Garman. Bull. Mus. Comp. Zool. 113(3): 230-259. [*Diplocardia invecta* n. sp.]
- Gates, G.E. 1959. Earthworms of North American caves. Natl. Speloeol. Soc. Bull. 21(2): 77-84.
- Gates, G.E. 1972a. Towards a revision of the earthworm family Lumbricidae. IV. The trapezoides species group. Contr. North American Earthworms (Annelida), no. 3, Bull. Tall Timbers Res. Sta., no. 12: 1-146.
- Gates, G.E. 1972b. On American earthworms genera. I. *Eisenoides* (Lumbricidae). Contr. North American Earthworms (Annelida), no. 4, Bull. Tall Timbers Res. Sta., no. 13: 1-17.
- Gates, G.E. 1973. The earthworm genus *Octolasion* in America. Contr. North American Earthworms (Annelida), no. 8, Bull. Tall Timbers Res. Sat., no. 14: 29-50.
- Gates, G.E. 1974a. On a new species of earthworm in a southern portion of the United States. Bull. Tall Timbers Res. Stn., No. 15: 1-13. [Komerktionidae, *Komarekiona eatoni* n. fam., n. gen., and n. sp.]
- Gates, G.E. 1974b. Contributions to a revision of the Lumbricidae. X. *Dendrobaena octaedra* (Savigny, 1826) with special reference to the importance of its parthenogenetic polymorphism for the classification of earthworms. Bull. Tall Timbers Res. Stn., No. 15: 15-57.
- Gates, G.E. 1974c. Contributions to a revision of the family Lumbricidae. XI. *Eisenia rosea* (Savigny, 1826). Bull. Tall Timbers Res. Stn., No. 16: 9-30.
- Gates, G.E. 1977a. More on the earthworm genus *Diplocardia*. Megadrilogica 3(1): 1-48. [*Diplocardia far alabamana* n. sp., *D. farmvillensis* n. sp., *Diplocardia nova* n. sp. and *Diplocardia sylvicola* n. sp.]
- Gates, G.E. 1977b. Contributions to a revision of the earthworm family Lumbricidae. XX. The genus *Eiseniella* in North America. Megadrilogica 3(5): 71-79.
- Gates, G.E. 1978. The earthworm genus *Lumbricus* in North America Megadrilogica 3(6): 81-116.
- Gates, G.E. 1979. Contributions to a revision of the earthworm family Lumbricidae. XXIII. The genus *Dendrodrilus* Omodeo, 1956 in North America. Megadrilogica 3(9): 151-162.
- Gates, G.E. 1982. Farewell to North American Megadriles. Megadrilogica 4(1-2): 12-77.
- Goto, S. and S. Hatai. 1899. New or imperfectly known species of earthworms. No. 2. Annot. Zool. Japan 3(1): 13-24. [*Amyntas agrestis* n. sp. and *Metaphere levis* n. sp.]
- Hoffmeister, W. 1843. Beiträge zur Kenntnis deutscher Landanneliden. Arch. Naturg. 9(1): 183-198. [*Lumbricus rubellus* n. sp.]
- James, S.W. 1988. *Diplocardia hulberti* and *D. rugosa*, new earthworms (Annelida: Oligochaeta: Megascolecidae) from Kansas. Proc. Biol. Soc. Washington 101(2): 300-307. [*Diplocardia hulberti* and *Diplocardia rugosa* n. sp.]
- Kinberg, J.G. 1867. Annulata nova. Öfv. Vetensk. Akad. Förh. Stockholm 23: 97-103, 356-357. [*Amyntas corticis* n. sp. (= *Amyntas diffringens*), *Amyntas gracilis* n. sp. (= *Amyntas hawayanus*)]
- Levinsen, G.M.R. 1884. Systematisk-geografisk oversigt de nordiske Annulata, Gephyrea, Chaetognathi og Balanoglossi. Vidensk. Meddel. Naturhist. Förh. Kjøbenhavn, ser. 4, 5: 92-350. [*Allolobophoridella eiseni* n. sp.]
- Linnaeus, C. 1758. Systema naturae per regna tris naturae, secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis, Edition decima, reformata. Tom I. Laurentii Salvii, Holmiae, 824 pp. [*Lumbricus terrestris* n. gen. and n. sp.]
- Macnab, J.A. and D. McKey-Fender. 1955. Studies in the genus *Diplocardia* (Oligochaeta: Megascolecidae). Wasmann J. Biol. 13(1): 113-143. [*Diplocardia smithi* n. sp.]

- Michaelsen, W. 1892. Terricolen der Berliner Zoologischen Sammlung. II. Arch. Naturg. 58(2): 209-261. [*Amyntas hilgendorfi* n. sp.]
- Michaelsen, W. 1894a. Oligochaeten des Naturhistorischen Museums in Hamburg. IV. Jahrbuch der Hamburg 8: 3-42. [*Bimastos beddardi* n. sp.]
- Michaelsen, W. 1894b. Die Regenwürmer-Fauna von Florida und Georgia. Zool. Jb. Syst. 8(2): 177-194. [*Diplocardia eiseni* n. sp. and *Eisenoides lönnbergi* n. sp.]
- Michaelsen, W. 1895. Zur Kenntnis der Oligochaeten. Abh. Verhandlungen des Naturwissenschaftlichen Vereins, Hamburg 13(2): 37 pp. [*Amyntas hupeiensis* n. sp.]
- Michaelsen, W. 1910. Zur Kenntnis der Lumbriciden und ihrer Verbreitung. Ann. Naturhist. Mus. Zool. Acad. Sci. St. Petersburg 15: 1-74. [*Eisenoides carolinensis* n. sp.]
- Moore, H.F. 1895. On the structure of *Bimastos palustris*, a new oligochaete. J. Morph. 10(2): 473-496. [*Bimastos palustris* n. gen and n. sp.]
- Murchie, W.R. 1962. *Diplocardia varivesicula*, a new megascolecid earthworms from Indiana. Ohio J. Sci. 66(6): 609-612. [*Diplocardia varivesicula* n. sp.]
- Murchie, W.R. 1963. Description of a new diplocardian earthworm, *Diplocardia longiseta* (Oligochaeta: Megascolecidae). Ohio J. Sci. 63(1): 15-18. [*Diplocardia longiseta* n. sp.]
- Murchie, W.R. 1965. *Diplocardia gatesi*, a new earthworm from North Carolina (Oligochaeta: Megascolecidae). Ohio J. Sci. 65(4): 208-211. [*Diplocardia gatesi* n. sp.]
- Murchie, W.R. 1967. Description of *Diplocardia macdowellii* a new megascolecid earthworm from Mississippi (Oligochaeta). Ohio J. Sci. 67(1): 50-53. [*Diplocardia macdowellii* n. sp.]
- Nelson, T.C. and W.M. Zillgitt. 1969. A forest atlas of the south. Ashville, NC: Forest Service, U.S.D.A., 27 pp. + 1 map.
- Omernik, J.M. 1987. Ecoregions of the conterminous United States. Map (scale 1:7,500,000). Annals Association of American Geographers 77(1): 118-125.
- Omernik, J.M. 1995. Ecoregions: A spatial framework for environmental management. In: Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making. Davis, W.S. and T.P. Simon (eds.) Boca Raton, FL: Lewis Publishers. pp. 49-62.
- Omernik, J.M. 2004. Perspectives on the nature and definition of ecological regions. Environmental Management 34 (Suppl. 1): S27-S38.
- Reynolds, J.W. 1974. Checklist, distribution and key to the Lumbricidae in Tennessee. J. Tenn. Acad. Sci. 49(1): 16-20.
- Reynolds, J.W. 1977a. The earthworms of Tennessee (Oligochaeta). II. Sparganophilidae, with the description of a new species. Megadrilogica 3(3): 61-64. [*Sparganophilus tennesseensis* n. sp.]
- Reynolds, J.W. 1977b. The earthworms of Tennessee (Oligochaeta). III. Komarekionidae, with notes on distribution and biology. Megadrilogica 3(4): 65-69.
- Reynolds, J.W. 1978. The earthworms of Tennessee (Oligochaeta). IV. Megascolecidae, with notes on distribution, biology and a key to the species in the state. Megadrilogica 3(7): 117-129.
- Reynolds, J.W. 1980. The earthworm family Sparganophilidae (Annelida, Oligochaeta) in North America. Megadrilogica 3(12): 189-204. [*Sparganophilus pearsei sarasotae* n. sp.]
- Reynolds, J.W. 2011. The earthworms (Oligochaeta: Acanthodrilidae, Eudrilidae, Glossoscolecidae, Komarekionidae, Lumbricidae, Lutodrilidae, Ocnerodrilidae, Octochaetidae, Megascolecidae and Sparganophilidae) of southeastern United States. Megadrilogica 14(9-12): 175-318.
- Reynolds, J.W. 2014. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Lumbricidae, Megascolecidae and Sparganophilidae) in Arkansas, USA. Megadrilogica 16(9): 95-110.
- Reynolds, J.W. 2015a. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Lumbricidae, and Sparganophilidae) in Missouri, USA. Megadrilogica 18(3): 37-55.

- Reynolds, J.W. 2015b. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae and Sparganophilidae) in Virginia, USA. *Megadrilogica* 18(5): 73-97.
- Reynolds, J.W. 2015c. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Eudrilidae, Lumbricidae, Megascolecidae and Sparganophilidae) in Alabama, USA. *Megadrilogica* 19(3): 23-40.
- Reynolds, J.W. 2015d. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Lumbricidae, Megascolecidae, Ocnodrilidae and Sparganophilidae) in Mississippi, USA. *Megadrilogica* 19(4): 41-60.
- Reynolds, J.W. 2015e. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae, Ocnodrilidae and Sparganophilidae) in North Carolina, USA. *Megadrilogica* 19(5): 61-84.
- Reynolds, J.W. 2015f. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Lumbricidae, Megascolecidae, Ocnodrilidae and Sparganophilidae) in Georgia, USA. *Megadrilogica* 19(6): 85-114.
- Reynolds, J.W. 2016. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Komarekionidae, Lumbricidae, Megascolecidae, and Sparganophilidae) in Kentucky, USA. *Megadrilogica* 19(9): 147-167.
- Reynolds, J.W. and M.J. Wetzel. 2004. Terrestrial Oligochaeta in North America north of Mexico. *Megadrilogica* 9(11): 71-98.
- Reynolds, J.W. and M.J. Wetzel. 2008. Terrestrial Oligochaeta (Annelida: Clitellata) in North America, including Mexico, Puerto Rico, Hawaii, and Bermuda. *Megadrilogica* 12(12): 157-208.
- Reynolds, J.W. and M.J. Wetzel. 2012. Terrestrial Oligochaeta (Annelida: Clitellata) in North America, including Mexico, Puerto Rico, Hawaii, and Bermuda. III. *Megadrilogica* 15(8): 191-211.
- Reynolds, J.W. and M.J. Wetzel. 2015. Nomenclatura Oligochaetologica – A catalogue of names, descriptions and type specimens. *Editio Secunda*. URL: <http://www.inhs.illinois.edu/people/mjwetzel/nomenoligo> (accessed: 12 January 2015).
- Reynolds, J.W., E.E.C. Clebsch and W.M. Reynolds. 1974. The earthworms of Tennessee (Oligochaeta). I. Lumbricidae. *Contr. N. Amer. Earthworms*, No. 3, *Bull. Tall Timbers Res. Stn.*, No. 17, *viii* + 133 pp.
- Rosa, D. 1891. Die exotischen terricolen des K.K. naturhistorischen Hofmuseums. *Ann. Hofmus. Wien* 6: 399-406. [*Amyntas hawayanus* n. sp. (= *Amyntas gracilis*)]
- Savigny, J.C. 1826. Analyses des travaux de l'Académie Royale des Sciences pendant l'année 1821, partie physique. Cuvier, M. le Baron G. (ed.) *Mém. Acad. Sci. Inst. France* 5: 176-184. [*Allolobophora chlorotica* n. sp., *Aporrectodea rosea* n. sp., *Dendrobaena octaedra* n. sp., *Dendrodrilus rubidus* n. sp., *Eisenia foetida* n. sp., *Eiseniella tetraedra* n. sp., *Octolasion cyaneum* n. sp., *O. tyrtaeum* n. sp.]
- Smith, F. 1895. A preliminary account of two new Oligochaeta from Illinois. *Bull. Illinois St. Lab. Nat. Hist.* 4(5): 138-148. [*Sparganophilus eiseni* n. sp.]
- Smith, F. 1928. An account of changes in the earthworm fauna of Illinois and a description of one new species. *Illinois Nat. Hist. Surv. Bull.* 17(10): 347-362. [*Bimastos heimburgeri* n. sp.]
- Smith, F. and E.M. Gittins. 1915. Two new species of Lumbricidae from Illinois. *Bull. Illinois St. Lab. Nat. Hist.* 10(7): 545-550. [*Bimastos longicinctus* and *Bimastos zeteki* n. sp.]
- Ude, H. 1885. Über die Rückenporen der Terricolen Oligochäten, nebst Beiträgen zur Histologie des Lieberaschlauches und zur Systematik der Lumbriciden. *Z. Wiss. Zool.* 43: 87-143. [*Aporrectodea longa* n. sp.]
- Ude, H. 1893. Beiträge zur Kenntnis ausländischer Regenwürmer. *Z. wiss. Zool.* 57: 57-75. [*Diplocardia singularis* n. sp.]

Ude, H. 1895. Ueber zwei neue Lumbriciden-Arten aus Nordamerika. Zool. Anz. 18: 339. [*Bimastos gieseleri* n. sp.]

APPENDIX

Ecoregions in the State of Tennessee

(modified from Omernik, 1987, 1995, 2004)

65. Southeastern Plains

The Southeastern Plains Ecoregion (65) although mostly tree-covered, these irregular plains have a mosaic of cropland, pasture, woodland, and forest land cover. Natural vegetation in the Louisiana portion was predominantly upland longleaf pine (*Pinus palustris*) woodlands, with smaller areas of oak-pine (*Quercus-Pinus*) and mixed hardwood forest. Uplands are underlain by poorly consolidated Pleistocene and Pliocene deposits, and soils are mostly acidic sandy loams, silt loams, and sandy clay loams. Although Pleistocene-age loess deposits do influence soil characteristics in the Louisiana part of the ecoregion, mainly in the western half, the region received substantially less loess deposition than Ecoregion 74 to the west. Some of the common soils are: Alfisols (Fragiudalfs, Hapludalfs) and Ultisols (Fragiudults, Hapludults, Paleudults, Rhodudults) and Inceptisols (Dystrochrepts). Elevations and relief are greater than in the Southern Coastal Plain Ecoregion (75) and Mississippi Alluvial Plain Ecoregion (73). Streams are low- to moderate-gradient with mostly sandy substrates. Commercial pine plantations are extensive. Timber production and dairy and beef cattle farming are major land uses, with urban and residential development increasing.

66. Blue Ridge

The Blue Ridge Ecoregion (66) is a narrow strip of mountainous ridges that are forested and well dissected. Crestal elevations range from about 305-1,737 metres on Mt. Rogers and tend to rise southward. Local relief is high and both the side slopes and the channel gradients are steep. Streams are cool and clear and have many riffle sections; they support a different, less diverse fish assemblage than the streams of the valleys below, which are warmer, lower in gradient, and more turbid. The Blue Ridge Ecoregion (66) is underlain by resistant and deformed metavolcanic, igneous, sedimentary, and metasedimentary rock. Inceptisols (Dystrochrepts, Eutrochrepts), Ultisols (Hapludults), and Alfisols (Hapludalfs) have developed on the Cambrian, Paleozoic, and Precambrian rock. The Blue Ridge Ecoregion (66) can be divided into northern (ecoregions 66a and 66b) and southern parts (ecoregions 66c, 66d, 66e) at the Roanoke River. North of the river, just three different rock types form the crest and the effects of differential erosion partially determine their local altitude. South of the Roanoke River, the Blue Ridge Mountains become higher and lithologically complex. Climate varies significantly. Generally, both growing season and precipitation increase southward. The frost-free period varies from less than 150 days to more than 175 days, and the precipitation varies from 99-124 cm. Locally, however, relief and topographic position have significant effects on the microclimate. The natural vegetation varies from north to south. North of a transitional area near the Roanoke River, it is predominantly Appalachian Oak Forest (dominated by white and red oaks, *Quercus alba*, *Q. rubra*). South of the transitional area, grows a mix of Appalachian Oak Forest, Oak-Hickory-Pine Forest [dominants: hickory (*Carya* spp.), longleaf pine (*Pinus palustris*), shortleaf pine *P. echinata*], loblolly pine (*P. taeda*), white oak and post oak (*Quercus stellata*)], and, in higher areas, Northern Hardwoods [dominants: sugar maple (*Acer saccharum*), yellow birch (*Betula alleghaniensis*), beech (*Fagus* spp.), and hemlock (*Tsuga* spp.)]. On the foothills, a mix of loblolly and shortleaf pines occur and are mixed with Appalachian Oak Forest.

67. Ridge and Valley

The Ridge and Valley Ecoregion (67) extends from Wayne County, Pennsylvania, through Virginia along a southwesterly axis. It is characterized by alternating forested ridges and agricultural valleys that are elongated and folded and faulted. Elevations range from about 152-1,311 metres. Local relief varies widely from approximately 15-457 metres. The Ridge and Valley Ecoregion (67) narrows toward the south and is generally bordered by the higher Blue Ridge Mountains and the higher and less deformed Allegheny and Cumberland plateaus. Underlying Ecoregion 67 are largely Paleozoic sedimentary rocks that have been folded and faulted. Sandstone, shale, limestone, and dolomite are the predominant rock types. Lithological characteristics often determine surface morphology. Many ridges are formed on well-cemented, relatively resistant material such as sandstone or conglomerate; they are often rather parallel and alternate with valleys but, in central Pennsylvania, they zigzag because resistant strata were compressed into plunging folds during orogeny and later eroded. Valleys tend to be created on weaker strata, including limestone and shale. Inceptisols (Dystrochrepts) and Ultisols (Hapludults, Paleudults, Rhodudults) are common and were developed on noncarbonate rock. Alfisols (Hapludalfs) and Ultisols (Hapludults, Paleudults) are found in the limestone valleys. The valleys vary in microtopography and agricultural potential. Valleys derived from limestone and dolomite are smoother in form and have a lower drainage density than those developed in shale. Shale valleys often display a distinctive rolling topography. Soils derived from limestone are fertile and well suited to agriculture, while those derived from shale have a much lower agricultural potential unless they are calcareous. Poultry

operations are locally common and economically important. Many of the stream networks are trellised; topography dictates that the swift, actively down-cutting streams which run off steep ridges must join the gentle valleys perpendicularly. Other larger rivers such as the Susquehanna River cross structure, cutting deep gorges through ridges in the process. High-gradient streams are common in watergaps and on ridge slopes; elsewhere, gentler gradient, warmer, more meandering streams are common. Partially as a result, the latitudinally extensive Ridge and Valley Ecoregion (67) has good aquatic habitat diversity. The natural vegetation varies from north to south. From northeastern Pennsylvania to near its border with Maryland, the Ridge and Valley Ecoregion (67) is dominated by Appalachian Oak Forest. Southward, Oak-Hickory-Pine Forest [dominants: hickory (*Carya* spp.), longleaf pine (*Pinus palustris*), shortleaf pine (*P. echinata*), loblolly pine (*P. taeda*), white oak (*Quercus alba*) and post oak (*Q. stellata*)] was common to about the James River, whereupon the Appalachian Oak Forest returns. Hemlock (*Tsuga canadensis*), along with a mixture of white pine (*Pinus strobus*), beech (*Fagus grandifolia*), and other hardwoods also occurred locally. Climate varies significantly in the Ridge and Valley Ecoregion (67). Generally, both growing season and precipitation increase southward. The frost-free period varies from less than 120 days to more than 180 days and the precipitation varies from 91-127 cm. Locally, however, relief and topographic position have significant effects on the microclimate. The Ridge and Valley Ecoregion (67) is significantly lower than the Central Appalachians Ecoregion (69). As a result, it has less severe winters, considerably warmer summer temperatures, and lower annual precipitation due to a rain shadow effect.

68. Southwestern Appalachians

Stretching from Kentucky to Alabama, these open low mountains contain a mosaic of forest and woodland with some cropland and pasture. The eastern boundary of the ecoregion, along the more abrupt escarpment where it meets the Ridge and Valley (67), is relatively smooth and only slightly notched by small, eastward flowing streams. Much of the western boundary, next to the Interior Plateau (71), is more crenulated, with a rougher escarpment that is more deeply incised. Some of the common soils are: Alfisols (Hapludalfs), Ultisols (Fragiudults, Hapludults, Paleudults) and Inceptisols (Dystrochrepts). The mixed mesophytic forest is restricted mostly to the deeper ravines and escarpment slopes, and the upland forests are dominated by mixed oaks (*Quercus* spp.) with shortleaf pine (*Pinus echinata*). Ecoregion 68 has less agriculture than the adjacent Ecoregion 71.

69. Central Appalachians

The Central Appalachian Ecoregion (69) includes parts of south central Pennsylvania, eastern West Virginia, western Maryland, southwestern Virginia, and northeastern Tennessee. It is a high, dissected, and rugged plateau made up of sandstone, shale, conglomerate, and coal of Pennsylvanian and Mississippian age. The plateau is locally punctuated by a limestone valley and a few anticlinal ridges. Its soils have developed from residuum and are mostly frigid and mesic Ultisols (Hapludults, Paleudults) and Inceptisols (Dystrochrepts). Local relief varies from less than 15 metres in mountain glades to over 594 metres in water gaps where high-gradient streams are common. Crestal elevations generally increase towards the east and range from about 366-1,402 metres. Elevations can be high enough to insure a short growing season, a great amount of rainfall, and extensive forest cover. In lower, less rugged areas, more dairy and livestock farms occur, but they are still interspersed with woodland. The limestone of the Greenbrier River Valley supports permanent bluegrass pasture. Bituminous coal mines are common and associated with stream siltation and acidification.

71. Interior Plateau

The Interior Plateau is a diverse ecoregion extending from southern Indiana and Ohio to northern Alabama. Rock types are distinctly different from the coastal plain sediments and alluvial deposits of ecoregions to the west, and elevations are lower than the Appalachian ecoregions (66, 67, 68) to the east. Mississippian to Ordovician-age limestone, chert, sandstone, siltstone and shale compose the landforms of open hills, irregular plains, and tablelands. Some of the common soils are: Alfisols (Fragiudalfs, Hapludalfs), Ultisols (Fragiudults, Hapludults, Paleudults) and Inceptisols (Dystrochrepts). The natural vegetation is primarily oak-hickory (*Quercus-Carya*) forest, with some areas of bluestem prairie (*Andropogon* spp.) and cedar glades (*Juniperus virginiana*).

73. Mississippi Alluvial Plain

The Mississippi Alluvial Plain Ecoregion (73) is a riverine ecoregion which extends from southern Illinois, at the confluence of the Ohio River with the Mississippi River, south to the Gulf of Mexico. The Mississippi River watershed drains all or parts of thirty-one states, two Canadian provinces, and approximately 124,300,000 hectares before the river finally reaches the Gulf. The Mississippi Alluvial Plain is mostly a broad, flat alluvial plain with river terraces, swales, and levees providing the main elements of relief. Soils are typically finer-textured and more poorly drained than the upland soils of adjacent Ecoregions 35 (South Central Plains) and 74 (Mississippi Valley Loess Plains), although there are some areas of coarser, better-drained soils. Some of the more common soils are: Hapludalfs, Fragiudalfs, Haplaquepts, Ochraqualfs, Haploquolls and Udifluvents. Winters are mild and summers are hot, with temperatures and precipitation increasing from north to south. Bottomland deciduous forest covered the region before much of it was cleared for cultivation. The ecoregion contained one of the largest continuous wetland systems in North America. The

widespread loss of forest and wetland habitat, however, has impacted wildlife and reduced bird populations, although it is still a major bird migration corridor. Today, constructed levees restrict the river from overflowing, opening large areas for extensive agricultural use. Almost all of the region is in cropland, and it receives large inputs of pesticides. Between the levees that parallel the Mississippi River is a corridor known as the "batture lands." The batture lands are hydrologically connected to the Mississippi River, are flood-prone, and contain remnant habitat for "big river" species (*e.g.*, pallid sturgeon) as well as river-front plant communities.

74. Mississippi Valley Loess Plains

This ecoregion stretches from the Ohio River in western Kentucky to Louisiana. It consists primarily of irregular plains, some gently rolling hills, and bluffs near the Mississippi River. The presence of thick deposits of loess is one of the distinguishing characteristics. The Bluff Hills in the western portion contain soils that are very deep, steep, silty, and erosive. Flatter topography is found to the east, and streams tend to have less gradient and more silty substrates than in the Southeastern Plains Ecoregion (65). Some of the more common soils are: Hapludalfs, Fragiudalfs, Haplaquepts, and Ochraqualfs. To the east, upland forests dominated by oak (*Quercus* spp.), hickory (*Carya* spp.), and both loblolly and shortleaf pine (*Pinus taeda*, *P. echinata*), and to the west, southern mesophytic forests characterized by beech (*Fagus* spp.), southern magnolia (*Magnolia grandiflora*), and American holly (*Ilex opaca*), were the dominant natural vegetation. Agriculture is now the typical land cover in the Kentucky and Tennessee portion of the region, while in Mississippi and Louisiana there is a mosaic of forest, pine plantations, pasture, and cropland.

Web Site for the Journal *Megadrilologica*:

<http://www.inhs.uiuc.edu/~mjwetz/Megadrilologica.home.html>

Web Site for *Nomenclatura Oligochaetologica – Editio Secunda*

A catalogue of names, descriptions, and type specimens of the Oligochaeta

<http://www.inhs.illinois.edu/people/mjwetz/nomenoligo>