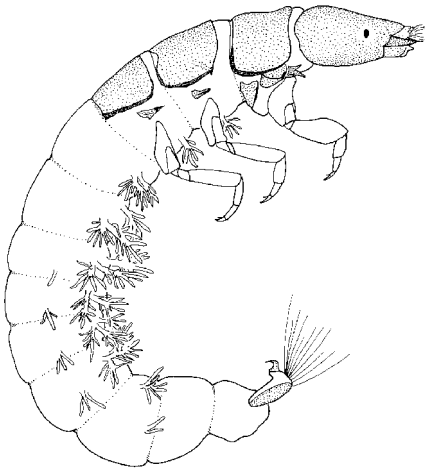

IDENTIFICATION MANUAL

FOR THE

CADDISFLY (TRICHOPTERA) LARVAE

OF

FLORIDA

by

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INTRODUCTION

Caddisflies (Trichoptera) are a diverse and vital biotic component of freshwater ecosystems, having been able to adapt and succeed in nearly every type of aquatic habitat. Although the greatest species diversity occurs in cool running waters, many species inhabit lakes and ponds including specialized habitats such as marshes, swamps, springs, seeps, and intermittent streams. A few species live on marine shores and some in moist soil as well. The biological roles of caddisflies in freshwater ecosystems have been well documented (Scott and Crossman, 1973; Wallace et al., 1982; Merritt et al., 1984; Irons et al., 1988), and their potential use as biological indicators of water quality is well known (Plafkin et al., 1989; Resh and Jackson, 1993; Johnson et al., 1993).

Caddisflies are one of the dominant aquatic insect groups in Florida. However, knowledge of the systematics of the caddisfly fauna in the state is still limited, most particularly for the larvae, the life stage that benthologists most often encounter in the field. Caddisflies are excellent indicators of water quality, and to appreciate fully the utility of the group as a bioassessment tool requires a good taxonomic knowledge of the fauna, particularly at the species level (Resh and Unzicker, 1975; Lenat, 1988). The ability to distinguish the larvae provides a better understanding of the patterns of population and production dynamics in freshwater ecosystems (Resh, 1976).

The literature dealing with the taxonomy of the caddisflies of Florida are very scattered in various publications, and it is a time-consuming exercise to search these references. The present study represents the first attempt to consolidate the available taxonomic information on the larval taxonomy of the caddisfly fauna in the state. This manual is far from being a panacea to the problem of limited taxonomic knowledge of the group but rather serves as a reminder of how much work still needs to be done. Larval-adult associations are available for only approximately 50% of the approximately 170 species represented in the state. The manual leaves plenty of room for improvement in this regard. A group as large as caddisflies requires years to conduct a more thorough and comprehensive taxonomic study.

HOW TO USE THE MANUAL

Area covered: This manual was prepared to aid aquatic biologists in the identification of the caddisfly larvae of Florida. The manual provides keys to the families, genera, and species (where possible) for the mature larvae of the caddisflies presently thought to occur in the state. In cases where the family is represented by a single genus, the generic names are included in the key to the families (e.g., Dipseudopsidae, Lepidostomatidae, Molannidae, Odontoceridae, Rhyacophilidae, Sericostomatidae). Furthermore, in cases where the family is represented by a single species, the specific names are indicated (e.g., Beraeidae, Helicopsychidae, Uenoidae). Similarly, in the key to genera of a particular family, a genus may be represented by one species, the specific name is then indicated in the key [e.g., *Ironoquia* (Limnephilidae), *Cyrnellus* (Polycentropodidae)]. The sources of information from which the keys are adapted are indicated at the end of each key.

During the course of preparing the manual, we found many species and a few genera that represent new state records. As a matter of fact, we have seen some specimens that presumably may represent new species (e.g., *Setodes* n. sp., *Agarodes* n. sp.). Certainly more new state records will be added in the future and more larval-adult associations of species will be accomplished. Therefore, we strongly recommend that other sources must be consulted in

addition to this manual when identifying the larvae of the caddisfly fauna of the state. For larval keys of families and genera, the papers by Ross (1944), Wiggins (1977, 1984), Unzicker et al. (1982), and Morse and Hozenthal (1984) are very useful. Significant references for the larval taxonomy of a given genus are included in the text as ADDITIONAL REFERENCES following the NOTES section. Complete information on these references is indicated in the LITERATURE CITED section of the manual.

Illustrations: The figures in this manual are a combination of original illustrations based on Florida specimens and illustrations adapted from other sources. If the illustrations were adapted or modified from other publications, the source of each figure is cited at least once within the manual. Diagnostic characters in the keys that a novice may have difficulty locating are indicated by arrows in the illustrations. The figures of diagnostic characters in the family key are numbered accordingly. In the keys to genera and species, if two or more figures are involved in a couplet, the left figure corresponds to the first diagnostic character that is referenced in the couplet.

Taxonomy: Appendix A shows that the arrangement of taxa follows the scheme of classification proposed by Weaver and Morse (1986). The subfamily level is excluded in the list of taxa. Taxonomic accounts (i.e., synonymies) of the genera and species are excluded in the text. Species that are presumably new to science are simply referred to as sp. A, B, etc... and their descriptions will be published elsewhere. Additionally, the appendix includes species (with question marks) that have not been recorded in the state but may occur here, based on their present geographic range. These yet-unreported species are briefly discussed in the text.

Text: The text for each family summarizes genera represented in the state and provides a short diagnosis of the larva and larval case and general habitat information. This is followed by a key to larvae of the Florida genera. The text for each genus gives a brief morphological DIAGNOSIS (in telegraphic form); NOTES of general information on the morphology, life history and ecology of the various species represented in the state; and ADDITIONAL REFERENCES for significant literature regarding the larval taxonomy of that particular genus. The authors of species names, noted in the CHECKLIST OF FLORIDA CADDISFLIES (Appendix A), are not shown in the text.

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In addition to the FAMU caddisfly collection, this study was immensely enhanced by the generous loans of specimens from the following biologists: W. R. Karsteter [Center for Aquatic Research and Resource Management (FSU)], L. Banks (FDEP, Jacksonville), L. Burton, J. Daigle, and R. Frydenborg (FDEP, Tallahassee), J. H. Epler (Crawfordville, FL), R. Mattson (Suwannee River Water Management District), P. Morgan (FDEP, Tampa), R. Payne and D. Ray (FDEP, Pensacola), R. Rutter and A. Walton (FDEP-Punta Gorda), and D. Strom (FDEP, Port

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Last but not least, we sincerely thank James L. Hulbert, Director, Surface Water Ambient Monitoring Program (FDEP), for his assistance in getting this research funded.

PREPARATION OF SPECIMENS

Preservation and Storage: Generally, the morphological structures that are used to identify the mature larvae of caddisflies preserve well as long as proper preserving procedures are followed. From experience, the following procedures work well. Newly collected benthic samples must be preserved in 85-95% ethyl alcohol. The preservative must be replaced with the same concentration within 24 hours if the samples are not processed or sorted immediately, or else the integrity of the insect tissues is destroyed. Once the specimens are sorted, they should be preserved in 75-80% ethyl alcohol. Wiggins (1977) recommended an initial preservation in Kahle's fluid for its superior fixing quality. We have experienced difficulty identifying specimens that were treated with Rose Bengal stain. The stain diffuses the cuticular coloration, thus making it difficult to discern the patterns of muscle scars. Small-sized species (e.g., *Oecetis* spp., *Hydroptila* spp.) are better stored in microvials inside 2 or 4-dram vials filled with alcohol. This procedure prevents or minimizes the mutilation of the larvae and breakage of the larval cases. Vials or any storage container with specimens must have complete locality labels. One of the pet peeves of systematists is identifying specimens that are not properly labeled or with field codes only. Locality, to some extent, may provide invaluable information for the identification of specimens.

Dissection: When dissection is needed, the larvae may be heated in 10% potassium hydroxide (KOH) for 3-5 minutes. Jewelers forceps and dissecting needles work very well in dissecting the structures for examination. Dissected structures placed in a concavity slide filled with 75% alcohol or glycerin generally offers a good view of the specimen under a good dissecting microscope (see equipment below); otherwise, mounting the specimen on a microscope slide would be the next step toward resolution of fine structures.

Equipment.

A. Dissecting Items: The examination of larvae under a dissecting microscope requires a minimum number of dissecting items: jewelers forceps, a set of dissecting needles, microdissecting

scissors, dissecting containers (e.g., Petri-dishes, Syracuse watch glasses) and polyethylene wash bottles.

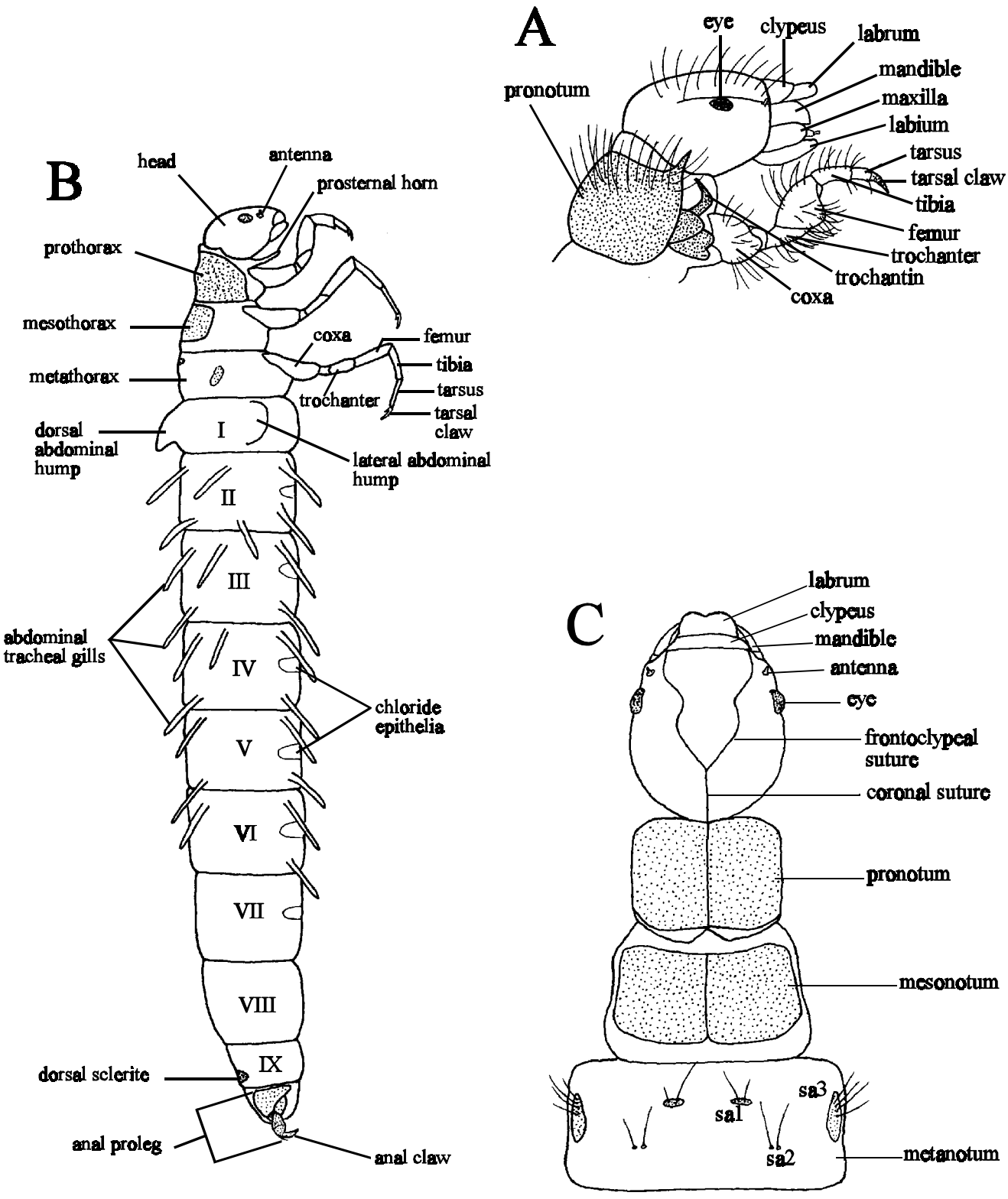
B. Microscopes: Most of the external morphological characters that are involved in identifying the larvae can be seen under a dissecting microscope that is equipped with 50X magnification. For illustrations or better viewing of minute parts, slide mounts may be required, together with a compound microscope with at least 100X magnification.

C. Mounting Media, and Microscope Slides: The CMC-10 medium is frequently used for mounting. One advantage of using the medium is that the specimen can be viewed immediately after mounting. This medium, however, has the tendency to form bubbles unless the glass slide cover slip is ringed with CMC-10 or Canada Balsam after the slide mount is dry. Canada Balsam is also a popular mounting medium. The resulting slide mount is more permanent than CMC-10. The Balsam reacts with alcohol or most preservatives and becomes cloudy for some time. The slide mount must be dry before the mounted specimen can be viewed under the microscope. Usually a Canada Balsam slide mount takes 24 hours to clear and dry when exposed to 62^{o} C temperature. All slide mounts must be labeled properly with complete locality information.

MORPHOLOGY (Refer to Figures A, B, and C on next page)

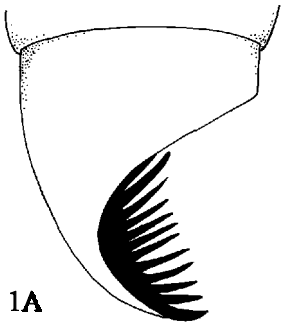
A general knowledge of the morphological terms associated with caddisfly larvae is necessary for ease of identification. The head is dorsally divided by a Y-shaped ecdysial line also referred to as the frontoclypeal and coronal sutures; the frontoclypeus is bordered laterally by the frontoclypeal sutures; and the parietals extend posteromesally along the coronal suture. Ventrally, the parietals mostly occupy the venter of the head and are separated by the ecdysial line, and the anterior and posterior apotomes. On the anterolateral portion of the head is located the eyes and antennae, which vary in location from family to family. Mouthparts include the labrum and labium, between which are mandibles and maxillae. Closely associated with the labium is the opening of the silk gland. The posterior portion of the head often has a number of muscle scars which appear as dark or light spots.

The thorax is composed of three segments: the prothorax, mesothorax and metathorax, each of which bears a pair of legs and often a sclerotized notum. The prothorax often has a finger-like prosternal horn and a lateral pair of trochantins, which can be distinctive for several families. The prothorax is always covered by dorsal sclerotized plates, while the meso- and metathorax are variable both in presence or absence of notal plates, and in extent of notal subdivisions. Setae, if arising on the meso- or metanota, are located in distinct areas termed setal area 1 (sa1), setal area 2 (sa2) and setal area 3 (sa3). Arrangement of both setal areas and sclerites can be of taxonomic significance. Thoracic legs are subdivided into the basal coxa, followed by the trochanter, femur, tibia and tarsus, which bears a tarsal claw apically. Tarsal claws usually each have a basal seta, the size of which can be of taxonomic value. The abdomen has nine segments that are usually membranous except for segment IX which has dorsal sclerites in some families. The first abdominal segment often bears a dorsal hump and a pair of lateral humps which function in allowing circulation of water through the case, as well as in securing the larva in the case. Some families have abdominal segments with numerous tracheal gills which function in gaseous exchange. Chloride epithelia, seen as oval rings especially on the venter of the abdomen, are found in the Limnephilidae, Hydroptilidae and Molannidae, and function in osmoregulation. The anal prolegs vary from family to family in degree of separation from the body, in associated sclerites, and in extent and nature of setation. Anal prolegs each have an anal claw which may be simple or complex, and which may bear accessory spines.

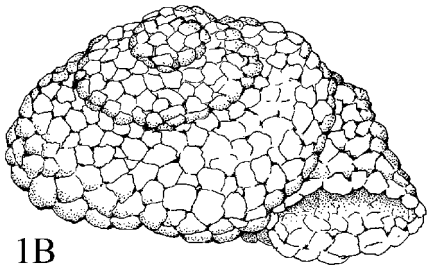

A
eye
clypeus
labrum
mandible
maxilla
labium
pronotum
tarsus
tarsal claw
tibia
femur
trochanter
trochantin
coxa
B
head
antenna
prosternal horn
prothorax
mesothorax
metathorax
coxa
femur
tibia
tarsus
tarsal claw
trochanter
dorsal abdominal hump
lateral abdominal hump
I
II
III
IV
V
VI
VII
VIII
IX
abdominal tracheal gills
chloride epithelia
dorsal sclerite
anal proleg
anal claw
C
labrum
clypeus
mandible
antenna
eye
frontoclypeal suture
coronal suture
pronotum
mesonotum
sa3
sa1
sa2
metanotum

KEY TO FAMILIES FOR MATURE LARVAE OF THE CADDISFLIES (TRICHOPTERA) OF FLORIDA*

1. Anal claw comb-shaped (fig. 1A), larva constructing portable case of sand grains or small rock fragments, coiled to resemble a snail shell (fig. 1B) . . . . . Helicopsychidae (p. 29), *Helicopsyche borealis*

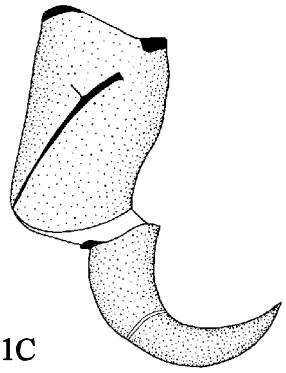


1A



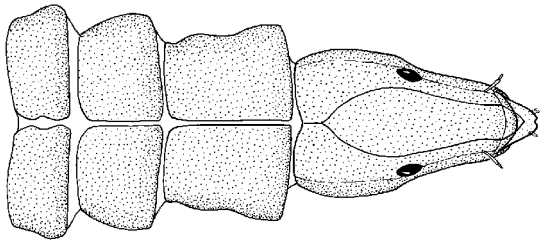
1B

Anal claw hook-shaped (fig. 1C); larval case straight or nearly so, not resembling a snail shell, or larva not constructing a portable case 2



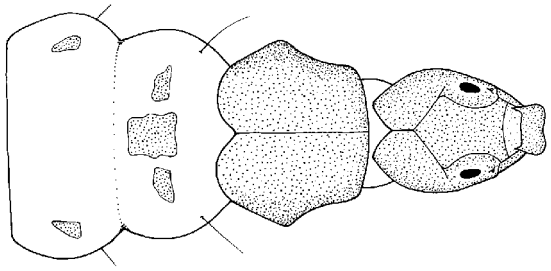
1C

2(1) Top of each thoracic segment covered by plates, usually closely appressed along the middorsal line, sometimes subdivided with thin transverse sutures, or some sclerites undivided (fig. 2A) 3



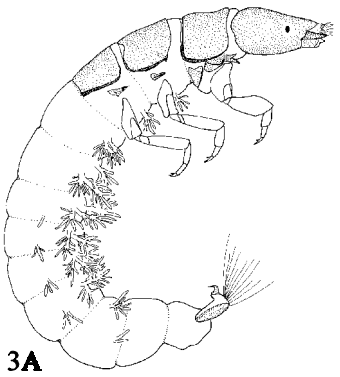
2A

Metanotum and sometimes mesonotum entirely membranous, or largely so and bearing several pairs of smaller sclerites (fig. 2B)
. 4

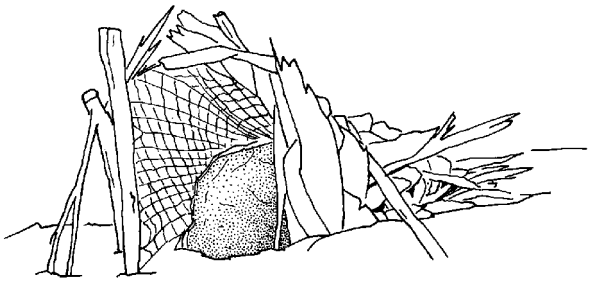


2B

3(2) Abdomen with ventrolateral rows of branched gills, and with prominent brush of long hairs at base of anal claw (fig. 3A); larvae construct fixed retreats (fig. 3B)
. . . . . Hydropsychidae (p. 30)

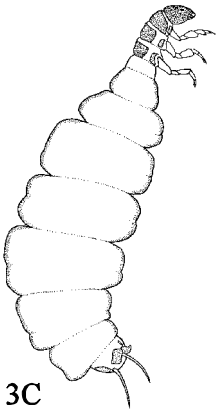


3A

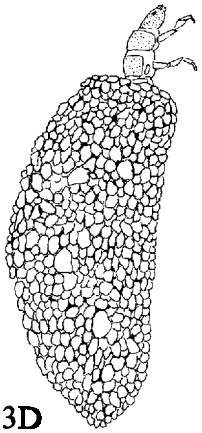


3B

Abdomen without ventrolateral gills, and with only 2 or 3 hairs at base of anal claw (fig. 3C); larvae small, usually less than 6 mm long; construct portable cases of sand, algae, or fixed cases of silk (fig. 3D)
. . . . . Hydroptilidae (p. 42)

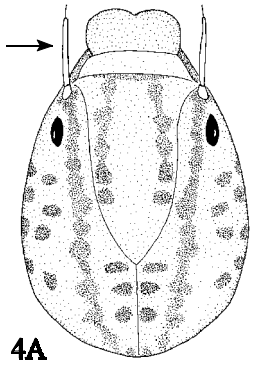


3C

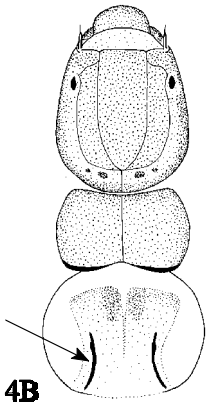


3D

4(2) Antennae very long and prominent, at least six times as long as wide (fig. 4A) and/or sclerites on mesonotum lightly pigmented except for a pair of dark curved lines on posterior half (fig. 4B); larvae construct portable cases of various materials . . . . . Leptoceridae (p. 50)

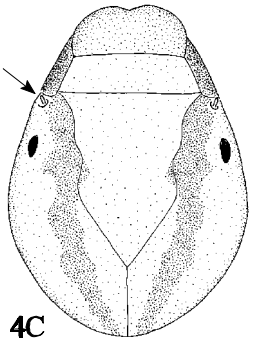


4A



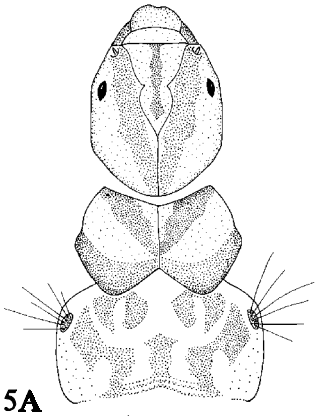
4B

Antennae of normal length, no more than three times as long as wide (fig. 4C), or not apparent; mesonotum without a pair of dark curved lines 5

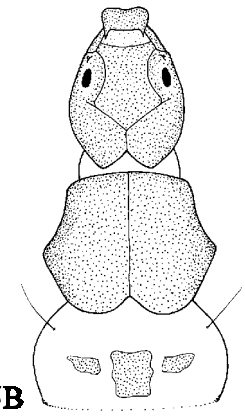


4C

5(4) Mesonotum largely or entirely membranous (fig. 5A), or with small sclerites covering not more than half of notum (fig. 5B); pronotum without anterolateral projections 6

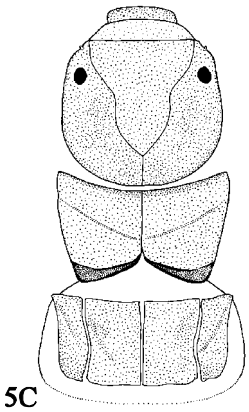


5A

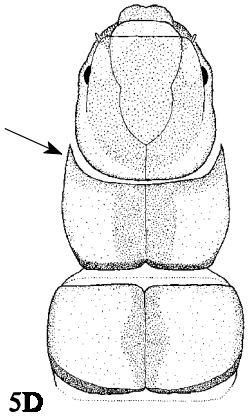


5B

Mesonotum largely covered by variously subdivided sclerotized plates (figs. 5C & 5D); pronotum sometimes with prominent anterolateral projections or processes (fig. 5D) 12

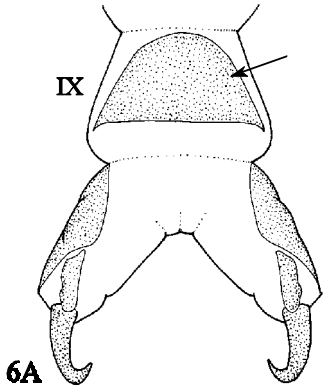


5C



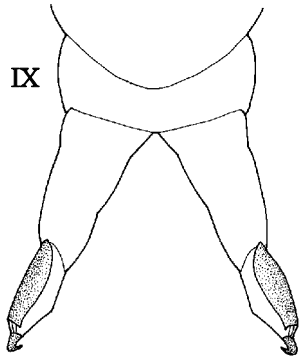
5D

6(5) Abdominal segment IX with sclerite on dorsum (fig. 6A), sometimes difficult to see and detectable only by its shiny surface 7



6A

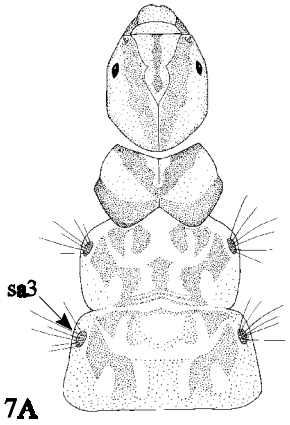
Abdominal segment IX with dorsum entirely membranous (fig. 6B) 9



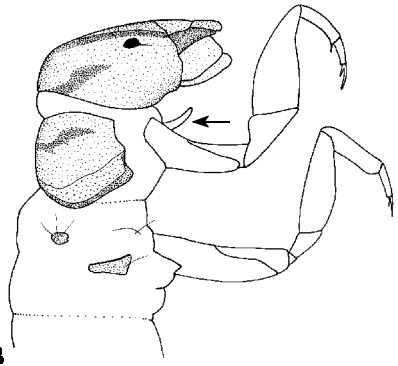
6B

7(6) Metanotal sa3 usually consisting of a cluster of setae arising from a small rounded sclerite (fig. 7A); prosternal horn present (fig. 7B); larvae construct tubular portable cases, mainly of plant materials

. . . . . Phryganeidae (p. 98)

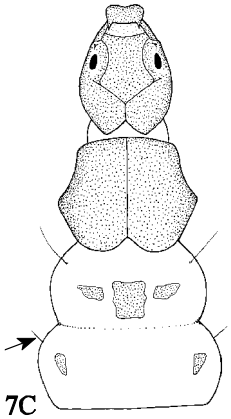


7A



7B

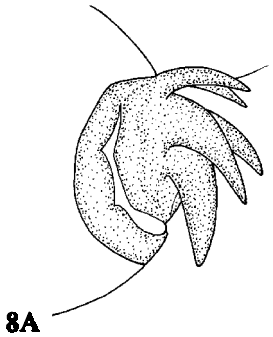
Metanotal sa3 consisting of a single seta not arising from a sclerite (fig. 7C); prosternal horn absent; larvae either constructing a tortoise-like case of stones or free living 8



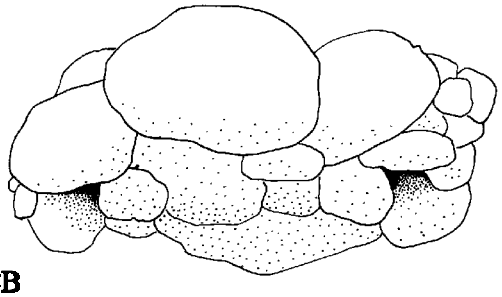
7C

8(7) Anal claw with at least one dorsal accessory hook (fig. 8A); basal half of anal proleg broadly joined with segment IX; larvae construct tortoise-like portable cases of small stones (fig. 8B)

. . . . . Glossosomatidae (p. 28), *Protoptila*

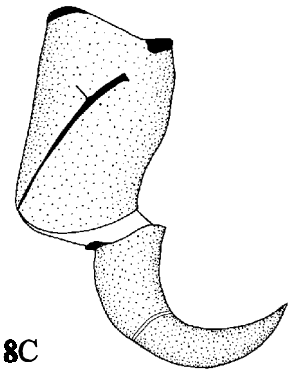


8A



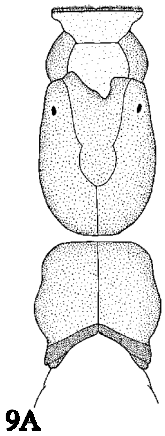
8B

Anal claw without dorsal accessory hooks (fig. 8C); most of anal proleg free from segment IX; larvae free living without cases
. . . . . Rhyacophilidae (p. 112), *Rhyacophila* (key to species, p. 113)

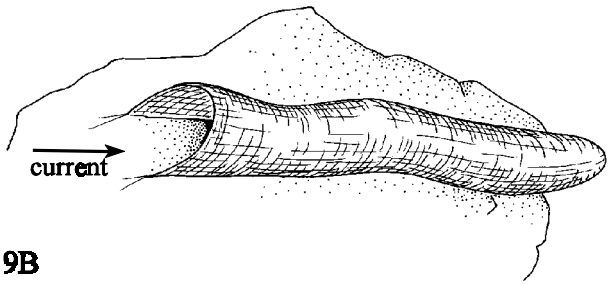


8C

9(6) Labrum membranous and T-shaped (fig. 9A), often withdrawn from view in preserved specimens; larvae construct fixed sac-shaped nets of silk (fig. 9B)
. . . . . Philopotamidae (p. 96)

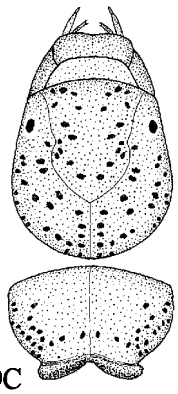


9A



9B

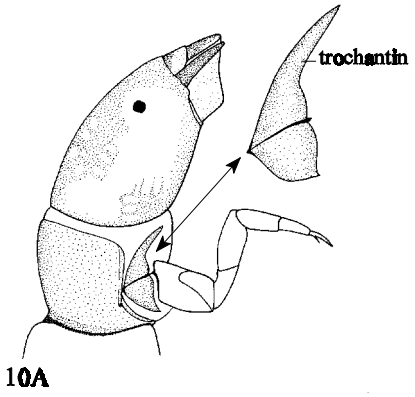
Labrum sclerotized, rounded and articulated in normal way (fig. 9C), always exposed 10



9C

10(9) Trochantin of prothoracic leg with apex acute, (fig. 10A); larvae construct exposed funnel-shaped capture nets, flattened retreats, or tubes buried in loose sediments

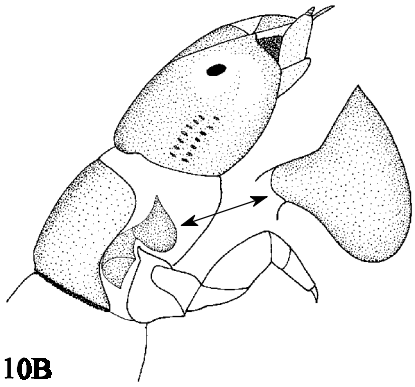
. 11



10A

Trochantin of prothoracic leg broad and hatchet-shaped, (fig. 10B); larvae construct tubular retreats on rocks and logs

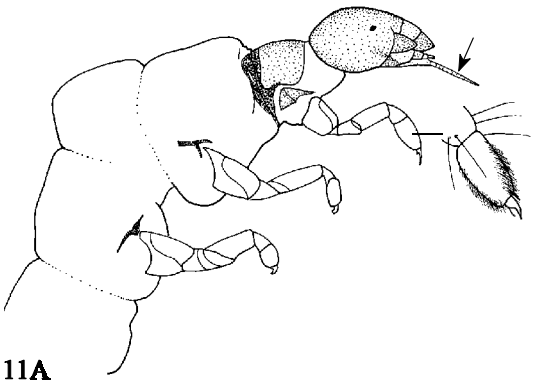
. . . . . Psychomyiidae (p. 109)



10B

11(10) Tarsi of all legs broad and flat, tarsal claws reduced (fig. 11A); tip of labium extremely elongate (fig. 11A)

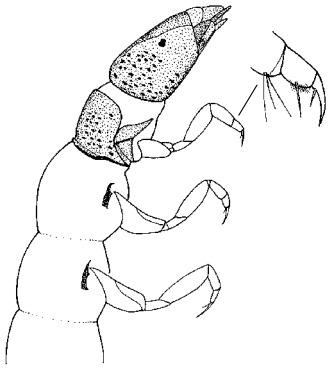
. . . . . Dipseudopsidae (p. 27), *Phylocentropus*



11A

Tarsi of all legs elongate, not broad and flat, tarsal claws not reduced (fig. 11B); tip of labium not as elongate

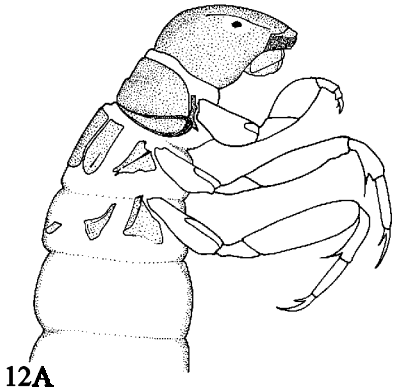
. . . . . Polycentropodidae (p. 101)



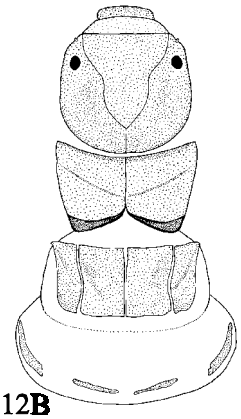
11B

12(5) Abdominal segment I lacking both dorsal and lateral humps (fig. 12A); metanotal sa1 usually lacking entirely, or, represented only by a single seta without a sclerite (fig. 12B); mesonotal sclerites subdivided (fig. 12B)

. . . . . Brachycentridae (p. 20)



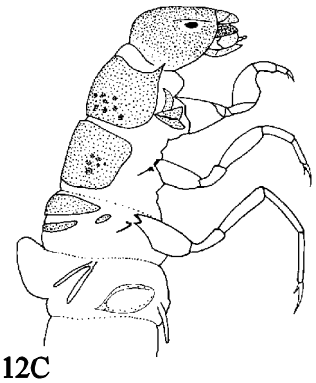
12A



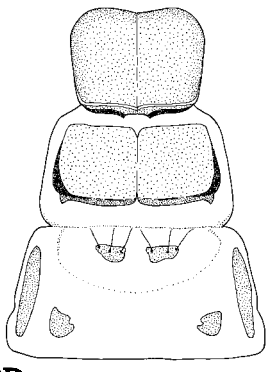
12B

Abdominal segment I always with a lateral hump on each side although not always prominent, and with or without a median dorsal hump (fig. 12C); metanotal sa1 always present, usually represented by a sclerite bearing several setae, but with at least a single seta (fig. 12D); mesonotal sclerites not as above (fig. 12D)

. 13



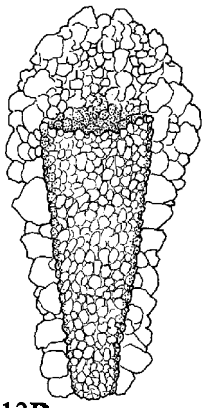
12C



12D

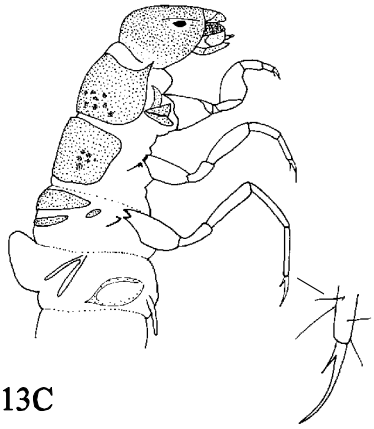
13(12) Tarsal claw of hind leg modified to form a short setose stub (fig. 13A), larval case of sand grains with a dorsal cowl and lateral flanges (fig. 13B)
. . . . . Molannidae (p. 92), *Molanna* (key to species, p. 93)

13A



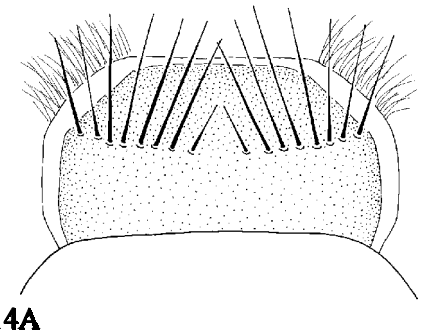
13B

Tarsal claw of hind legs no different in structure from those of other legs (fig. 13C); larval case not as above
. 14

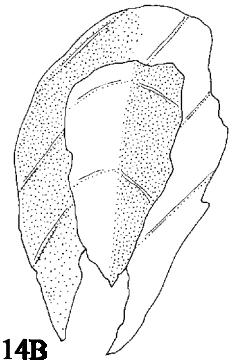


13C

14(13) Labrum with transverse row of approximately 16 long setae across central part (fig. 14A); larval case a hollowed twig or 2 leaf pieces (fig. 14B)
. . . . . Calamoceratidae (p. 25)

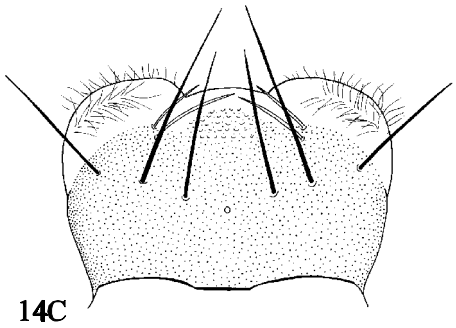


14A

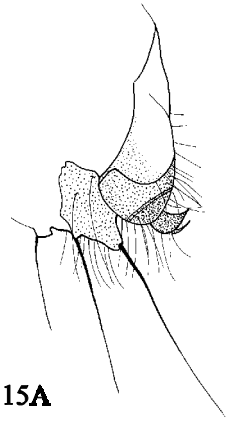


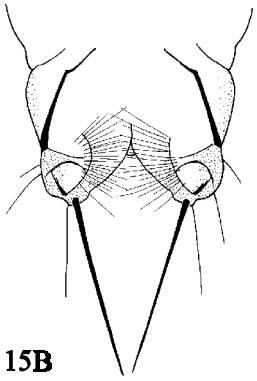
14B

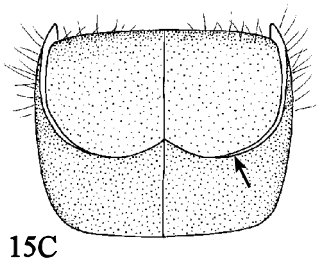
Labrum with no more than 6 long setae across central part (fig. 14C)
. 15


14C

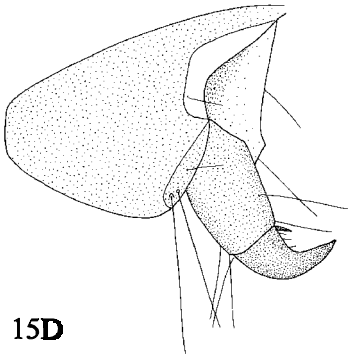
15(14) Anal proleg with lateral sclerite much reduced in size and produced posteriorly as a lobe from which a stout apical seta arises (fig. 15A); base of anal claw with ventromesal membranous surface bearing a prominent brush of 25-30 fine setae (fig. 15B); transverse carina on pronotum (fig. 15C); larval case of sand grains
. . . . . Beraeidae (p. 19), *Beraea gorteba*

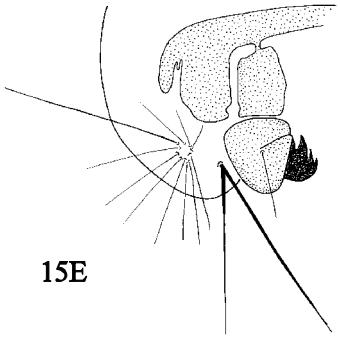

15A


15B

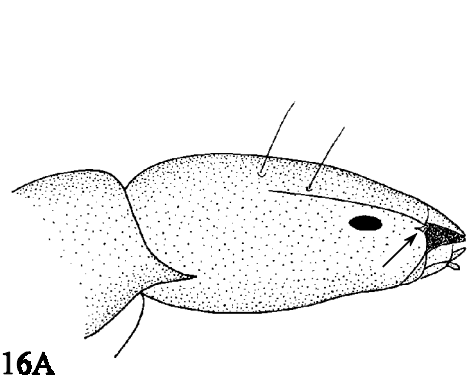

15C

Anal proleg with lateral sclerite not produced posteriorly as a lobe around base of apical setae (figs. 15D & 15E); base of anal claw with ventromesal surface lacking prominent brush of fine setae although setae may be present dorsally
. 16

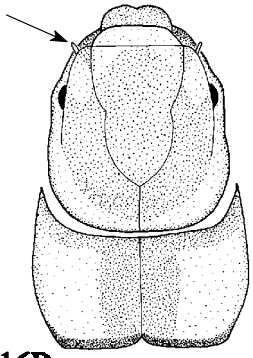

15D


15E

16(15) Antennae situated at or very close to the anterior margin of the head capsule (figs. 16A & 16B); prosternal horn lacking; larval cases mainly of rock fragments 17

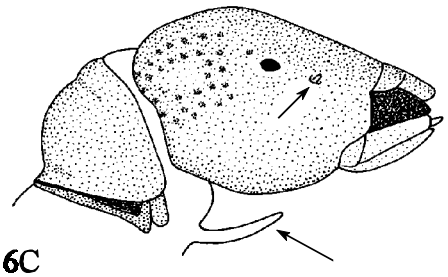


16A



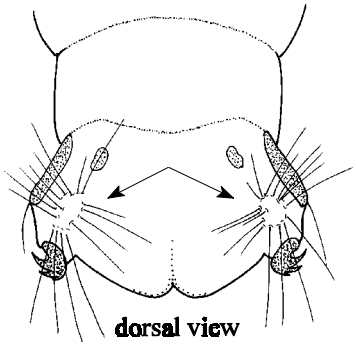
16B

Antennae removed from the anterior margin of the head capsule and approaching the eye (fig. 16C); prosternal horn present although sometimes short (fig. 16C); larval cases of rock fragments or plant materials 18

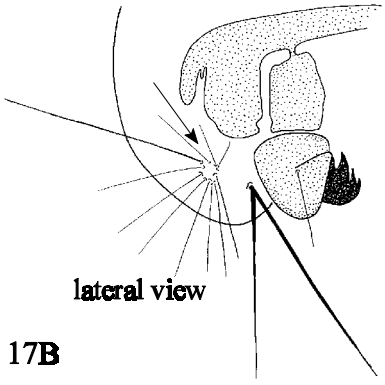


16C

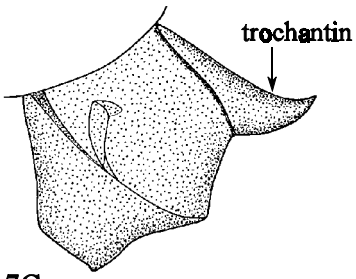
17(16) Anal proleg with dorsal cluster of setae posteromesad of lateral sclerite (figs. 17A & 17B); foretrochantin relatively large, the apex hook-shaped (fig. 17C); dorsal sclerites of metathorax divided at midline; larval case mainly of sand . . . . . Sericostomatidae (p. 114), *Agarodes* (key to subgenera, p. 115)



17A

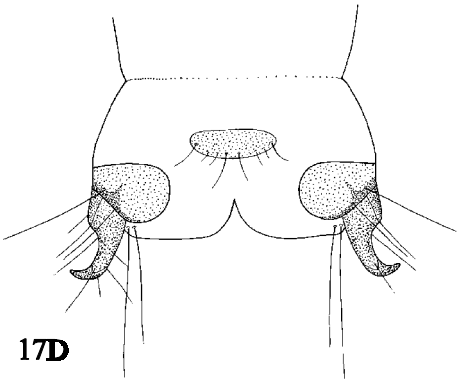


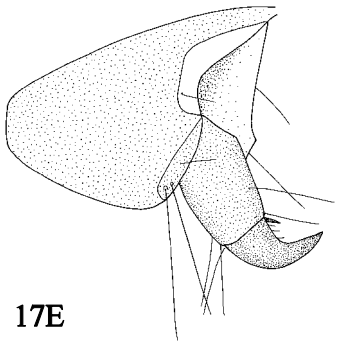
17B

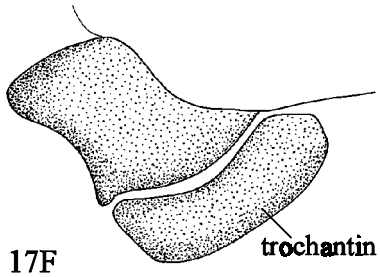


17C

Anal proleg without cluster of dorsal setae posteromesad of lateral sclerite (figs. 17D & 17E); foretrochantin small, the apex not hook-shaped (fig. 17F); dorsal sclerites of metathorax entire; larval case mainly of small rock fragments
. . . . . Odontoceridae (p. 94),
Psilotreta (key to species p. 95)

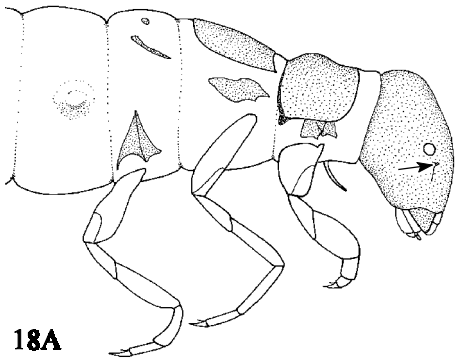

17D


17E

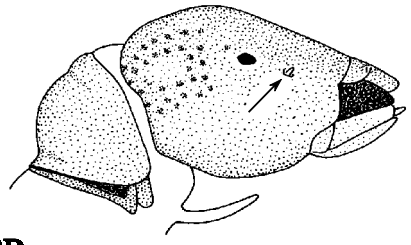


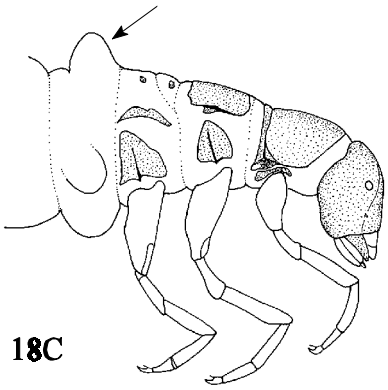
17F

18(16) Antennae close to the anterior margin of the eye (fig. 18A), median dorsal hump of segment I lacking (fig. 18A); larval cases of various materials and arrangements, frequently 4-sided
. . . . . Lepidostomatidae (p. 49),
Lepidostoma


18A

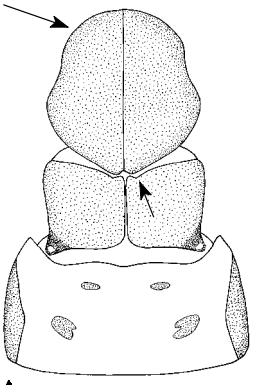
Antennae approximately halfway between the anterior margin of the head capsule and the eye (fig. 18B); median dorsal hump of segment I almost always present (fig. 18C)
. 19


18B

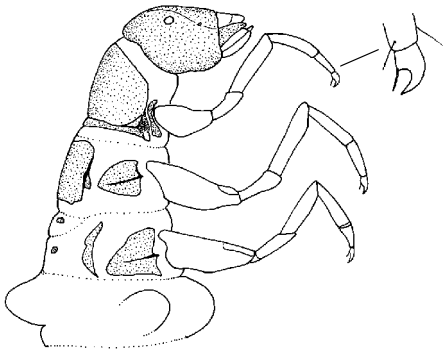

18C

19(18) Anterior margin of pronotum rounded and anterior margin of mesonotum notched on either side of meson (fig. 19A); prosternal horn reduced; basal seta of tarsal claw elongate, extending to near tip of claw (fig. 19B)

. . . . . Uenoidae (p. 116), *Neophylax concinnus*



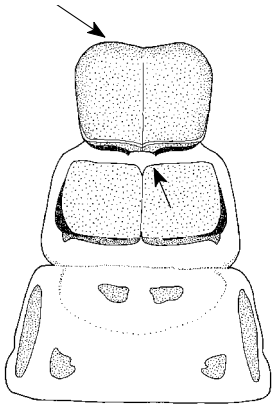
19A



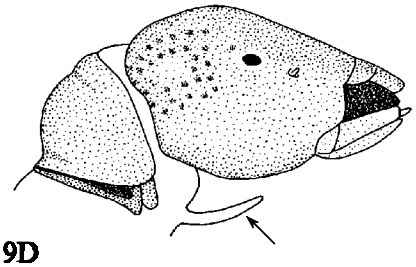
19B

Anterior margin of pronotum and mesonotum more or less straight (fig. 19C); prosternal horn not reduced (fig. 19D); basal seta of tarsal claw short, not extending to tip of claw

. . . . . Limnephilidae (p. 89)



19C



19D

* key to families adapted from Wiggins (1984).

FAMILY BERAEIDAE

The beraeids are rare caddisflies, and are represented in North America by the genus, *Beraea.* The larvae are morphologically recognized by the greatly reduced lateral sclerite of each anal proleg, each with a posteriorly produced lobe supporting a stout seta, and the setaceous ventromesal membranous surface of the anal claw (figs. 15A, 15B in family key). The larval case is constructed mainly of sand grains.

Genus ***Beraea*** Stephens

DIAGNOSIS: The above morphological characteristics of the larva identify the genus as well.

NOTES: Of the three North America species of *Beraea*, *B. gorteba*, *B. fontana*, *B. nigritta*, only *B. gorteba* occurs in the Southeast. The species has never been recorded in Florida, but the geographic proximity of the type locality (Roberta, Georgia) to Florida suggests that the species may occur in the state. The type locality is within the Flint River watershed, and the Flint and Chattahoochee Rivers are the two main branches of the Apalachicola River.

The larva of *B. gorteba* has 3-4 large spines on each anterolateral process of the pronotum (fig. A below) compared to 5-7 smaller spines in *B. fontana* and *B. nigritta* (Hamilton, 1985).

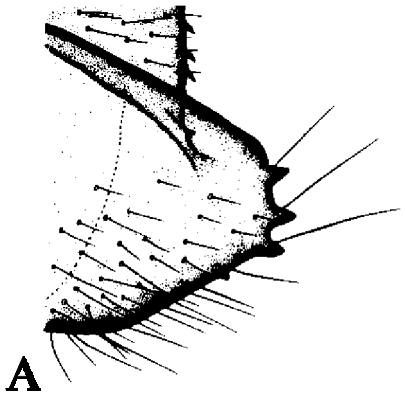


FIGURE: (Hamilton, 1985) - A. *Beraea gorteba*, anterolateral process of pronotum, right lateral.

Knowledge of the ecology and life history of *B. gorteba* is limited. According to Hamilton (1985) the larvae and pupae were collected in a side channel of Spring Creek, a small, second order, blackwater stream near Roberta, Georgia. The side channel where the larvae were mostly collected receives ground water and seepage from hillside springs as the main sources of water. Gut content analysis suggested that the larvae are primarily detritivores (Hamilton, 1985).

The adult emergence of *B. gorteba* has been observed in May and early June, in central Georgia (Hamilton, 1985).

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1954, 1977, 1984); Unzicker, Resh, and Morse (1982); Hamilton (1985).

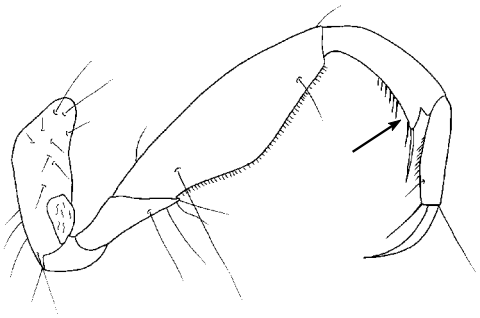
FAMILY BRACHYCENTRIDAE

The brachycentrid caddisflies are represented in Florida by the genera *Brachycentrus* and *Micrasema*. Both genera occur throughout much of North America.

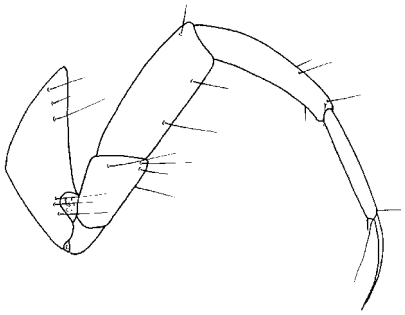
The brachycentrid larvae are morphologically distinguished from the other caddisfly families by the following combination of characters: absence of dorsal and lateral humps on abdominal segment I, metanotal sa1 either is entirely lacking or is represented by a single seta without a sclerite, and subdivided mesonotal sclerites (figs. 12A, 12B in family key). The portable larval cases are constructed of various materials and arrangements. The larvae are most abundant in cool lotic habitats such as springbrooks, creeks and streams, and some species also inhabit the wave-washed shores of lakes.

KEY TO GENERA FOR MATURE LARVAE OF FLORIDA BRACHYCENTRIDAE*

1. Meso- and metathoracic legs long, femora about as long as head capsule, tibiae each produced distally into prominent process from which stout spur arises
. . . . . *Brachycentrus* (p. 21)



Meso- and metathoracic legs shorter, femora much shorter than head capsule, each tibia not produced distally into prominent process, although spur arises from about the same point on unmodified tibia
. . . . . *Micrasema* (p. 23)



* key to brachycentrid genera adapted from Morse and Holzenthal (1984).

Genus ***Brachycentrus*** Curtis

DIAGNOSIS: Ventral margin of femora, tibiae, and tarsi of meso- and metathoracic legs each with row of modified, short spinous setae; and tibiae each produced distally into prominent process with stout spur (see figure in key to genera).

NOTES: There are two species of *Brachycentrus* in Florida, *B. chelatus* and *B. numerosus*, the latter species is herein reported in the state for the first time. The species, *B. americanus*, was erroneously reported to occur in Florida by Denning (1971) (Flint, 1984). Both *B. chelatus* and *B. numerosus* belong to the subgenus *Sphinctogaster*, a group that uniquely has 2 pairs of long submesal setae on the abdominal sternum.The larval cases are typically 4-sided, tapered, and constructed of small rectangular pieces of plant material. The larvae attach the anterior end of the case to the substrate and extend the head and legs in a filtering posture to obtain food (Flint, 1984). The larvae of *B. chelatus* have a uniformly dark brown or fuscous head and brownish-fuscous meso- and metathoracic tarsi compared to the banded or spotted head and generally pale yellow meso- and metathoracic tarsi (except ventral margins dark brown) of *B. numerosus.*

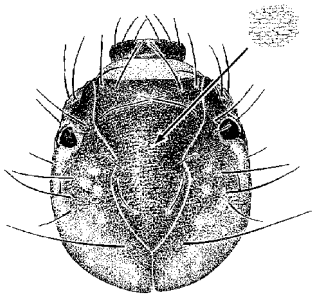
The life histories of *B. chelatus* and *B. numerosus* have never been observed in Florida. Collection records, however, indicate that the larvae of both species apparently occur throughout the year.

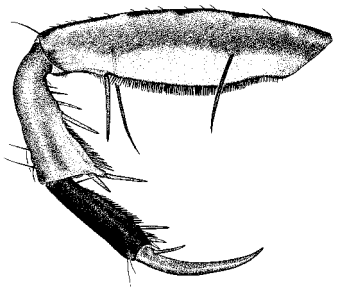
The larvae of both *B. chelatus* and *B. numerosus* have been collected in cool lotic habitats in the panhandle region of the state. We have examined larvae of *B. chelatus* that were collected from the Blackwater River, Okaloosa Co.; Crooked Creek, Gadsden Co.; Juniper Creek, Santa Rosa Co.; and Perdido River, Escambia Co. Likewise, we have seen larvae of *B. numerosus* from the Escambia River, Escambia Co.; Holmes Creek, Holmes Co.; and Yellow River, Okaloosa Co.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982); Flint (1984).

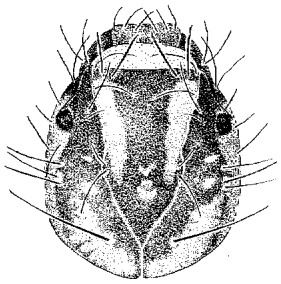
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *BRACHYCENTRUS**

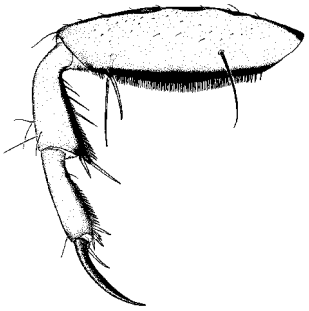
1. Head uniformly dark brown or fuscous, rarely paler over muscle scars; coloration of meso- and metathoracic tarsi dark brown
. . . . . *Brachycentrus chelatus*





Head distictly banded or spotted with fuscous and yellow marks; meso- and metathoracic tarsi pale except ventral margins dark brown
. . . . . *Brachycentrus numerosus*





* key and figures to *Brachycentrus* species adapted from Flint (1984).

Genus ***Micrasema*** MacLachlan

DIAGNOSIS: Ventral margins of meso- and metathoracic legs lacking specialized setal fringe, apex of each tibia unmodified but with one large seta (see figure in key to genera).

NOTES: Three species of *Micrasema*, *M. rusticum*, *M. wataga*, and *Micrasema* n. sp., occur in Florida. All three species belong to the *M. rusticum* group whose larvae have the mesonotal sclerite partially or completely divided into four plates. The larvae are easily separated by the pattern of muscle scars on the head, and the material and construction of their larval cases. *Micrasema rusticum* has a curved larval case constructed of sand, and a distinctly bold, regular pattern of muscle scars on the head. *Micrasema wataga* and *Micrasema* n. sp. both have straight larval cases constructed of plant material, the latter, however, has more well-defined muscle scars on the head than the former (see figures in key).

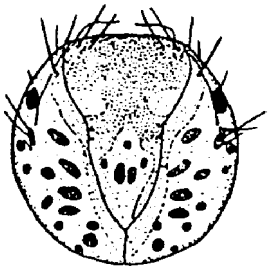
Knowledge of the biology of *Micrasema* is limited. A summary of available information on emergence of *Brachycentrus* and *Micrasema* in North and South Carolina, by Unzicker et al. (1982), indicated that *M. rusticum* emerges in mid-April through May, and *M. wataga* in May to early October. Emergence of the species in Florida has never been reported.

Micrasema spp. mainly occur in cool spring-fed streams and rivers in panhandle Florida where the larvae are mostly associated with submerged vegetation. We have examined larvae of *Micrasema rusticum*, an uncommon species in Florida, collected from the Shoal River, Okaloosa Co. and the Econfina Creek, Bay Co. Larvae of *Micrasema* n. sp. and *M. wataga* are more common, and we have examined larvae collected from various sites in the western panhandle.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Chapin (1978); Unzicker, Resh, and Morse (1982).

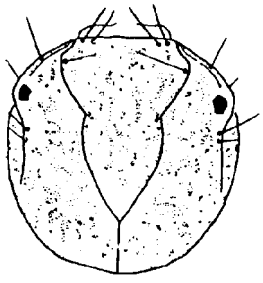
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *MICRASEMA**

1. Case curved, constructed of sand; head pale yellow to light brown, with bold, regular muscle scar pattern of dark spots
. . . . . *Micrasema rusticum*

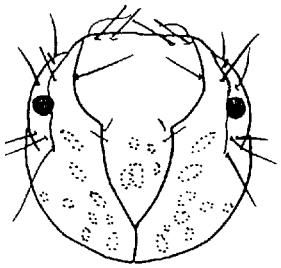


Case straight, constructed of strips of plant materials wound around the circumference; head lacking pattern of bold, regular muscle scars, if evident, these appearing as indistinct blotches or rings or light brown spots
. 2

2(1) Head pattern with very irregular or mottled appearance
. . . . . *Micrasema wataga*



Head pale yellow with posterior light brown muscle scars
. . . . . *Micrasema* n. sp.



* key and figures to *Micrasema* species adapted from Chapin (1978).

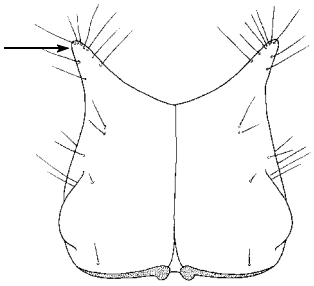
FAMILY CALAMOCERATIDAE

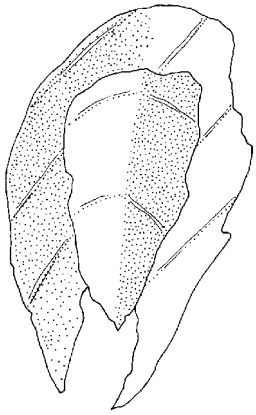
The Calamoceratidae include three North America genera of which *Anisocentropus* and *Heteroplectron* are found in Florida. Calamoceratid larvae are morphologically recognized by a prominent midtransverse row of approximately 16 long setae on the labrum (fig. 14A in family key). Larvae of both Florida genera are shredders, feeding upon decomposing vascular plant tissue (Unzicker et al., 1982). *Anisocentropus* larvae construct relatively flat cases of two fastened and overlapping leaf pieces. *Heteroplectron* use twigs which are hollowed out and lined with silk for their cases.

KEY TO THE GENERA AND SPECIES FOR THE MATURE LARVAE OF FLORIDA CALAMOCERATIDAE*

1. Anterolateral corners of pronotum each extended into prominent projection; gills branched; larval case consists of two leaf pieces, larger dorsal piece overlapping smaller ventral one

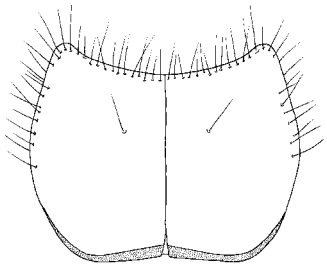
. . . . . *Anisocentropus, A. pyraloides*





Anterolateral corners of pronotum somewhat extended, but much less than above; gill filaments single; larval case a hollowed twig

. . . . . *Heteroplectron, H. americanum*



* key to calamoceratid genera adapted from Morse and Holzenthal (1984).

Genus ***Anisocentropus*** (MacLachlan)

DIAGNOSIS: Larvae with anterolateral corners of pronotum each produced into prominent projection, and abdominal gill filaments branched. Larval case constructed from 2 ovately cut leaf pieces with larger dorsal piece fastened to smaller ventral piece, space between two pieces providing larval chamber.

NOTES: The larvae of *Anisocentropus pyraloides* are strongly depressed dorsoventrally, the spindly hind legs are twice as long as the mesothoracic legs, and the abdomen is laterally fringed with dense setae. The head and thorax are yellowish brown.

Except for the collection records, life history information of *A. pyraloides* in Florida is non-existent. We collected larvae of various sizes almost all year and the adults came to light March through October. Wallace and Sherberger (1970) observed the species to have multi-cohort populations, with early- and last-instar larvae occurring in both late winter and early spring in south and southeastern Georgia. Pupation takes place in mid- to late April, and adult emergence occurs in May.

Anisocentropus pyraloides is fairly common in sand-bottomed streams in North and Northwest Florida. We have found that the larvae are commonly associated with trapped debris, snags and exposed roots where the stream undercuts the bank.

ADDITIONAL REFERENCES: Wallace and Sherberger (1970); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Heteroplectron*** (MacLachlan)

DIAGNOSIS: Anterolateral corners of pronotum not extended into prominent projections as in *Anisocentropus* and abdominal gills single. Larval case consisting of hollowed-out twig lined with silk.

NOTES: Larvae of *Heteroplectron* differ greatly in general appearance from *Anisocentropus*. The abdomen of *Heteroplectron* is cylindrical and lacks the lateral fringe of dense setae of *Anisocentropus*. The head and thoracic sclerites are dark brown, and the hind and middle legs are subequal in length.

Heteroplectron contains only two species (*H. americanum* and *H. californicum*). *Heteroplectron americanum*, previously thought to occur only as far south as the Appalachians of Georgia and Alabama, is herein reported for the first time in Florida.

The life history of *H. americanum* in the southeast has not been studied. However, a life history study of *H. americanum* from a coastal plain stream in Delaware by Patterson and Vannote (1979), established that *H. americanum* is univoltine and has a single population cohort. In Florida we collected the mature larvae of *H. americanum* during spring and fall months from small ravine streams within the Apalachicola Bluffs and Ravines Preserve in Liberty Co. We are unaware of its occurrence anywhere else in Florida, although its occurrence in similar ravine habitats is certainly possible. Larvae of *H. americanum* are difficult to detect in the field because their hollow twig case provides excellent camouflage.

ADDITIONAL REFERENCES: Wiggins (1977); Unzicker, Resh, and Morse (1982).

FAMILY DIPSEUDOPSIDAE

Wells and Cartwright (1993) recently broadened the definition of the family Dipseudopsidae based primarily on the morphological features of the female abdomen and the larvae. These authors also discussed briefly the taxonomic history of the group. Earlier papers by Ross (1965) and Ross and Gibbs (1973) discussed the evolutionary history of the group as well. Of the four dipseudopsid genera presently recognized worldwide, only the genus *Phylocentropus* is represented in the Nearctic Region and the species are mostly found in eastern North America.

The dipseudopsid larvae are morphologically recognized by the flat tarsi which are broader than the tibiae, the long tip of the labium (fig. 11A in family key), and the short and basally broad mandibles, each with a thick mesal brush. These modifications of the legs and mandibles are adaptations to life in sand tubes which are buried deeply into the substrate and project a short distance up into the current of the stream (Ross and Gibbs, 1973; Wallace et al., 1976).

Genus ***Phylocentropus*** Banks

DIAGNOSIS: Larvae with broad and densely pilose tarsi, and mandibles short and triangular with thick mesal brush (fig. 11A in family key). Larvae construct bi- and multibranched tubes of fine sand glued together with silk and buried into substrate.

NOTES: Of the five presently recognized Nearctic species of *Phylocentropus*, three are represented in Florida, *P. carolinus*, *P. lucidus*, and *P. placidus*. One other species, *P. harrisi*, may also be found in the state as its present geographic distribution extends to the Alabama-Florida line (Schuster and Hamilton, 1984; Harris et al., 1991).

Although the larvae of *P. carolinus*, *P. lucidus*, and *P. placidus* have been described, we have not found reliable morphological characters to separate the larvae of these species with confidence. Mature larvae of *P. lucidus* have head capsules of less than 0.6mm width, those of mature *P. carolinus* and *P. placidus* are larger (Menking, 1978), but other characters are needed to distinguish *P. lucidus* larvae from young *P. carolinus* and *P. placidus* larvae.

The *Phylocentropus* spp. of Florida appear to be geographically confined to the northern half of the state, from Gainesville northward. We have collected the larvae in small streams (e.g., Attapulgus Creek, Gadsden Co.; Burnt Mill Creek, Jefferson Co.; FAMU farm streams, Gadsden Co.; and streams in the Apalachicola Bluffs and Ravines Preserve) to medium-sized rivers (e.g., Aucilla River, Jeff./Madison Co.; St. Marks River, Wakulla Co.). The larvae were collected by dipnets near the stream or river shorelines where snags and decaying leaves were trapped in the sandy substrates. So far, we have collected the adults of *P. lucidus* by light traps only along small spring-fed and sand-bottomed streams like the ones in the FAMU farm and in the Apalachicola ravines. The adults of *P. carolinus* and *P. placidus* have been collected along small streams as well as medium-sized rivers (e.g., Aucilla River).

Like most of the caddisflies in Florida, the life history of *Phylocentropus* is unknown. We have collected adults in both spring and fall and larvae of various sizes throughout the year. Whether the multi-cohort pattern is reflective of a multivoltine life cycle remains to be investigated.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982), Wells and Cartwright (1993).

FAMILY GLOSSOSOMATIDAE

The genus *Protoptila* is the only glossosomatid caddisfly represented in Florida. The glossosomatid larvae are easily distinguished by the presence of anal claws with at least one dorsal accessory hook (fig. 8A in family key) and the unique tortoise-like case constructed of small stones (fig. 8B in family key).

Genus ***Protoptila*** Banks

DIAGNOSIS: Larvae with long, thin seta on each tarsal claw (fig. A below), and larval case made of relatively large stones (fig. 8B in family key).

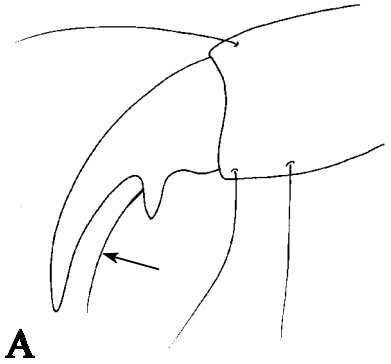


FIGURE: A. *Protoptila* sp., mesothoracic tarsus, lateral.

NOTES: *Protoptila* is herein reported for the first time in the state and has been collected from the Chipola River, Calhoun Co. and Holmes Creek, Washington Co. The identification of these larvae to species remains unresolved until the adults are associated. *Protoptila palina* has been recorded near the Alabama-Florida line (Harris et. al., 1991), and there is a good possibility that the *Protoptila* larvae collected in Florida are *P. palina*.

The life history of *Protoptila* in Florida is unknown. The specimens collected from the Chipola River were associated with limestone outcroppings and were collected from the same locality as the larvae of *Setodes*.

ADDITIONAL REFERENCES: Wiggins (1977); Unzicker, Resh, and Morse (1982).

FAMILY HELICOPSYCHIDAE

The family Helicopsychidae is represented in North America by the geographically widespread genus *Helicopsyche*. The larvae are morphologically recognized by the broad joint of the basal-half of the anal proleg and abdominal segment IX, and the comb-shaped anal claw (fig. 1A in family key). Unique to the group is the helical, shell-like, larval case which is constructed of sand grains (fig. 1B in family key).

Genus ***Helicopsyche*** von Siebold

DIAGNOSIS: The characters above define the larva of the genus as well.

NOTES: Of the seven species of *Helicopsyche* represented in North America, *H. borealis* and *H. paralimnella* are the only species known to occur east of the Mississippi River. *Helicopsyche borealis* extends its southern geographic range to Florida. The larvae have been collected from the Chipola River, near the boat ramp north of State Rd. 274, Calhoun Co. in July and September and from the Alapaha River, Hamilton Co. in August (J. Epler, pers. comm.). The species was previously reported from Gilchrist Co. (Gordon, 1984) and the Suwannee River (Mattson, 1992).

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982).

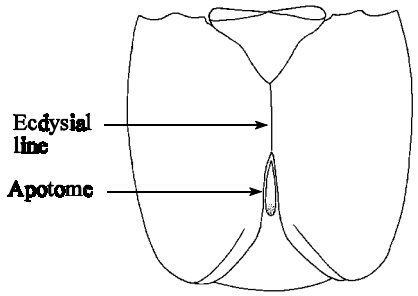
FAMILY HYDROPSYCHIDAE

The highly diverse hydrosychid caddisflies are represented in Florida by the genera *Cheumatopsyche*, *Diplectrona*, *Hydropsyche*, *Macrostemum*, and *Potamyia*. The heavily sclerotized plate of each thoracic notum and conspicuously branched ventral abdominal gills of the larvae (fig. 3A in family key) easily separate the Hydropsychidae from the other caddisfly families. The larvae typically construct a fixed retreat where they live and spin a net for capturing food (fig. 3B in family key).

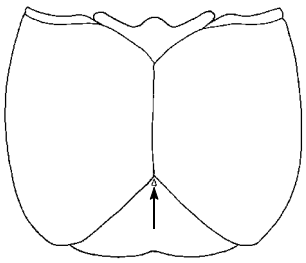
The larvae are mostly lotic dwellers and are quite common in streams and rivers of various sizes. Some larvae also live in lentic habitats, particularly along the wave-swept shores of lakes and impoundments, and lotic-depositional habitats as well.

KEY TO GENERA FOR MATURE LARVAE OF FLORIDA HYDROPSYCHIDAE*

1. Posterior ventral apotome at least one-half as long as median ecdysial line . . . . . (Subfamily Diplectroninae), *Diplectrona*, *D. modesta*

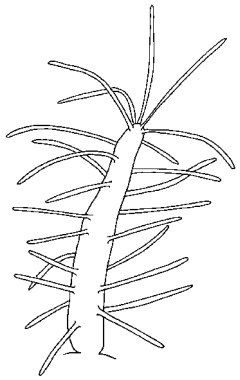


Posterior ventral apotome much less than one-half as long as median ecdysial line or inconspicuous 2



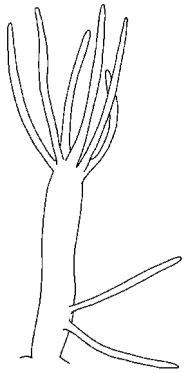
2(1) Abdominal gills with up to 40 filaments arising fairly uniformly along central stalk; foretrochantin never forked

. . . . . (Subfamily Macronematinae), *Macrostemum*, *M. carolina*



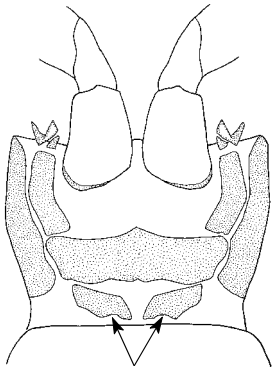
Abdominal gills with up to 10 filaments arising mostly near apex of central stalk; foretrochantin usually forked

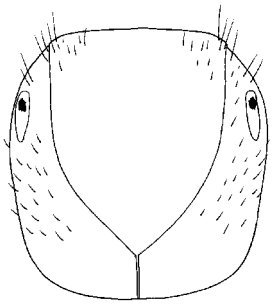
. . . . . (Subfamily Hydropsychinae)...3



3(2) Prosternum with a pair of large sclerites in intersegmental fold posterior to prosternal plate; anterior margin of frontoclypeus entire

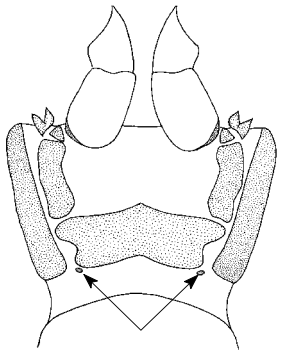
. . . . . *Hydropsyche* (p. 35)

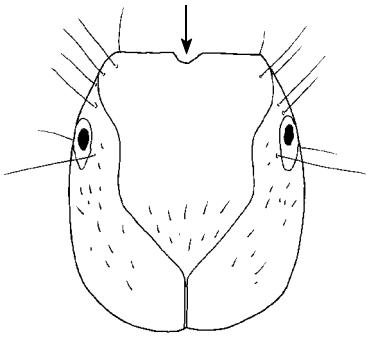




Prosternum with 2 very small sclerites posterior to prosternal plate; anterior margin of frontoclypeus usually with median notch

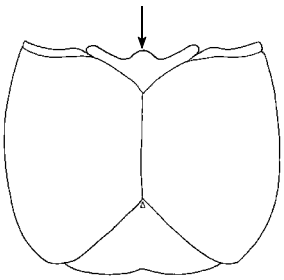
. 4

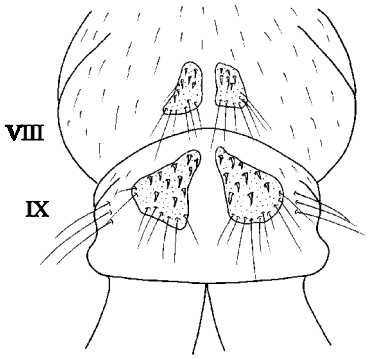


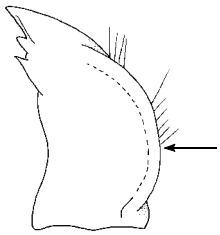


4(3) Anterior ventral apotome of head with prominent anteromedian projection; posterior margin of each sclerite on abdominal sternum IX entire; lateral border of each mandible flanged; foretrochantin forked or not

. . . . . *Potamyia, P. flava*

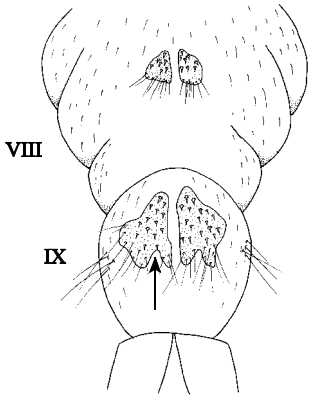


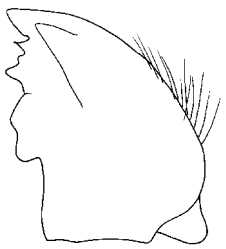




Anterior ventral apotome without anteromedian projection; posterior margin of each sclerite on abdominal sternum IX notched; mandible not flanged; fore trochantin forked

. . . . . *Cheumatopsyche*





* key to hydropsychid genera adapted from Morse and Holzenthal (1984).

Genus ***Cheumatopsyche*** Wallengren

DIAGNOSIS: Larvae of *Cheumatopsyche* distinguished from other hydropsychid genera by the following combination of characters: absence of anteromedian projection on anterior ventral apotome of head; notched posterior margin of each sclerite on abdominal sternum IX; inconspicuous posterior ventral apotome; tiny posterior sclerites on prosternum; and forked trochantins (see figures in key to genera).

NOTES: The eight *Cheumatopsyche* species (see Appendix A) reported in Florida are known only from the adults. Four other species, *C. campyla, C. geora, C. miniscula,* and *C. sordida,* very likely occur in the state based on their geographic distribution. Harris et al. (1991) have collected all four species from streams and rivers near the Alabama-Florida state line.

Cheumatopsyche is a common and often one of the most dominant hydropsychid genera in many river systems in the Southeast. We also found this to be the case in Florida; the genus is not only geographically widespread in the state but the larvae were collected from a wide variety of habitats ranging from small streams to large rivers, and pristine to seriously damaged systems. The presence of *Cheumatopsyche* larvae in the Fenholloway River, a damaged system that has received about 190 million liters per day of cellulose mill wastes the past 40 years, strongly suggests a broad spectrum of tolerance to organic pollution. Although *Cheumatopsyche* is generally considered a pollution-tolerant group, the various species certainly have different levels of tolerances to contamination. Unfortunately, the larvae of *Cheumatopsyche* are taxonomically one of the least known and presently are not identifiable to species.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Diplectrona*** Westwood

DIAGNOSIS: Larvae of *Diplectrona* distinguished from other Florida hydropsychid genera by presence of posterior ventral apotome with length of at least one-half of median ecdysial line (see figure in key to genera).

NOTES: The genus *Diplectrona* is represented in Florida by the species, *D. modesta.* The broad lateral angles near the midlength of the frontoclypeus (fig. A below) are characteristic of *D. modesta* as well as other species in this subfamily not present in Florida.

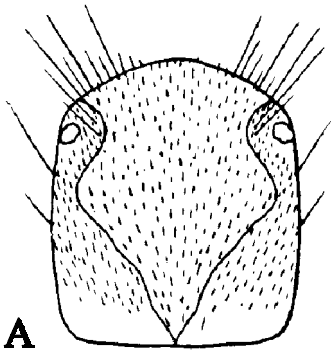


FIGURE: (Ross, 1944) - A. *Diplectrona modesta*.

Life history information on *D. modesta* in Florida is unknown. The species has been observed to have a univoltine life cycle in a 4th order southern Appalachian stream (Benke and Wallace, 1980). We found the species to be very common in small clear streams in North Florida, and particularly abundant and often the most dominant hydropsychid in small ravine and steephead streams. The filter feeding larvae are commonly associated with areas of leaf accumulation.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982); Morse and Barr (1990).

Genus ***Hydropsyche*** Pictet

DIAGNOSIS: Larvae of *Hydropsyche* distinguished from other hydropsychid genera by pair of large sclerites in intersegmental fold posterior to prosternal plate of prosternum (see figure in generic key).

NOTES: A key to the larvae of the caddisfly genera *Hydropsyche* Pictet and *Symphitopsyche* Ulmer (now *Ceratopsyche* Ross and Unzicker for Nearctic species, debatably genus or subgenus) in eastern and central North America (Trichoptera:Hydropsychidae) by Schuster and Etnier (1978) includes most of the species occurring in Florida. The key, however, relies heavily on color pattern and it must be used with caution. We found that the *Hydropsyche* larvae in Florida are generally paler than the northern conspecific populations, and the color patterns are often not as distinctive as the figures in the key show. We have seen larvae showing a wide range of head color patterns that would not fit the key to species. A good example is the larvae that we have collected from the Fenholloway River, a damaged system as previously mentioned.

There are eight species of *Hydropsyche* that have been reported in Florida (see Appendix A), and perhaps five more, *H.* (*H.*) *alabama*, *H.* (*H.*) *betenni*, *H.* (*H.*) *scalaris*, *H.* (*Ceratopsyche*) *sparna*, and *H.* (*H.*) *venularis*, may be found in the state based on their present geographic distribution.

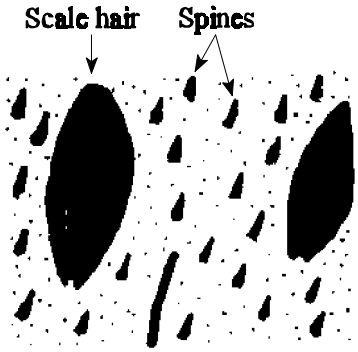
Except for *H.* (*H.*) *alvata* and *H.* (*H.*) *orris* the rest of the *Hydropsyche* represented in Florida are known from the larval stage. Based on the specimens that we have examined, it appears that *H.* (*H.*) *decalda* and *H.* (*H.*) *rossi* are the most common species of *Hydropsyche* in the state. Like the genus *Cheumatopsyche*, *Hydropsyche* spp. are geographically widespread in Florida, and occur in a wide variety of lotic habitats and from relatively clean to heavily contaminated systems.

Studies on the ecology and general biology of *Hydropsyche* have been conducted elsewhere [Gordon and Wallace (1975), Wallace (1975), Wallace et al. (1977), and Merritt and Wallace (1981)], but none have been from Florida. *Hydropsyche* larvae [e.g., *H.* (*H.*) *betteni*] feed primarily on fine particles collected in their nets, primarily animal remains and diatoms (Fuller and Mackay, 1981). A more recent study on *Hydropsyche* spp. [i.e., *H.* (*H.*) *betteni*, *H.* (*Ceratopsyche*) *sparna*] has indicated the importance of microhabitat flow on larval distribution (Osborne and Herricks, 1987).

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Schuster and Etnier (1978); Flint, Voshell, and Parker (1979); Unzicker, Resh, and Morse (1982); Sheftner and Wiggins (1986).

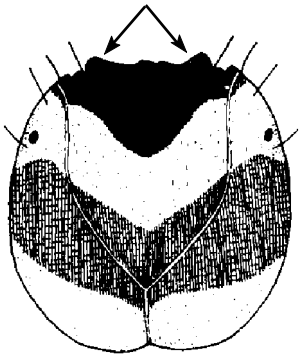
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *HYDROPSYCHE** **

1 Dorsum of abdominal segments with minute spines on at least segments I-III ; scale hairs present on at least the last 3 abdominal segments . . . . . (Subgenus *Hydropsyche*). . . 2



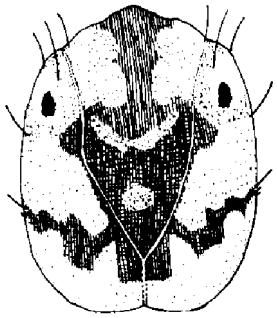
Dorsum of abdomen lacking minute spines; club hairs present on dorsum of abdomen; scale hairs lacking . . . . . (Subgenus *Ceratopsyche*), *H. sparna*

2(1) Anterior margin of frontoclypeus with 2 upturned teeth or denticles . . . . . *H. incommoda*



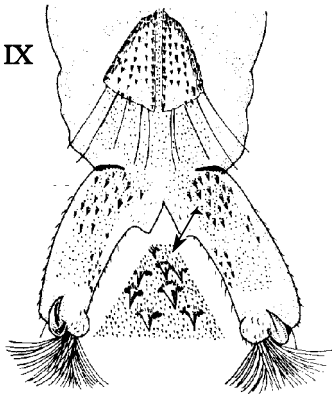
Anterior margin of frontoclypeus without teeth, margin straight or convex; color pattern of head not as above
. 3

3(2) Frontoclypeus produced into a low, wide angle forming a triangular point
. . . . . *H. phalerata*



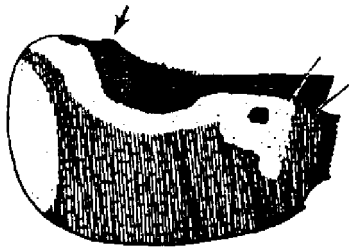
Anterior margin of frontoclypeus straight or, at most, broadly rounded
. 4

4(3) Venter of anal leg with large, stout, heavily sclerotized setae
. . . . . *H. scalaris*

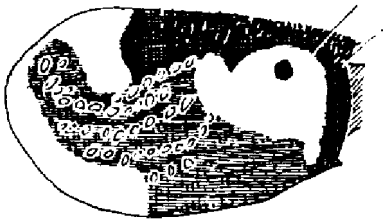


Venter of anal leg without such setae
. 5

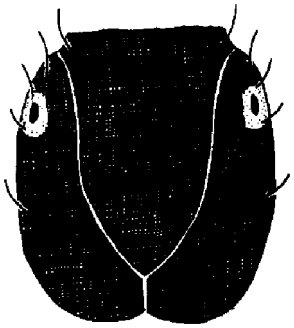
5(4) Posterior angle of frontoclypeus with elevated mound or tubercle (best seen in lateral or posterior aspect of head)
. 6



Posterior angle of frontoclypeus level with remaining posterior part of sclerite, mound or tubercle absent
. 7

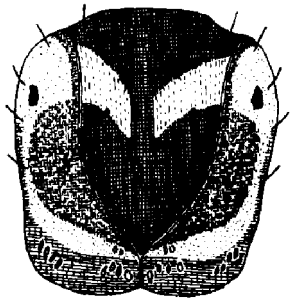


6(5) Sides of head evenly curved; head typically unicolored dark brown to black except for light area around eye and occasionally behind eye
. . . . . *H. betteni*



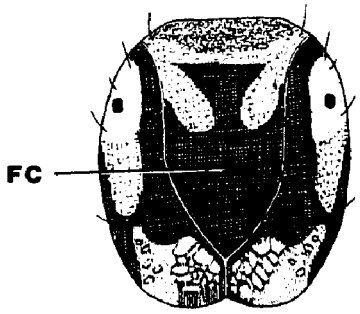
Sides of head constricted centrally and widened anteriorly (in dorsal aspect), posterior area of head not as wide as anterior; head mostly dark brown with pair of large, diagonal, tear-shaped spots; sides and top of head near epicranial stem with several dark brown, oval muscle scars

. . . . . *H. elisoma*



7(5) Frontoclypeus (FC) with many stout, bristle-like setae conspicuous on body of sclerite, most abundant on posterior half of sclerite

. . . . . *H. mississippiensis*

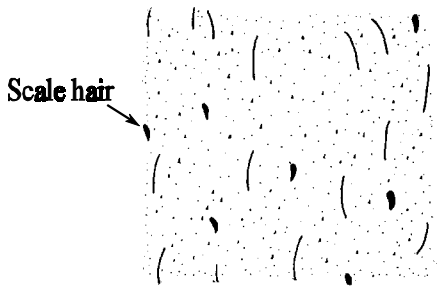


Bristle-like setae if present, restricted to anterolateral corners of frontoclypeus; posterior half of sclerite may have minute, clear, spine-like setae, but lacks larger bristle-like setae; color pattern of head not as above

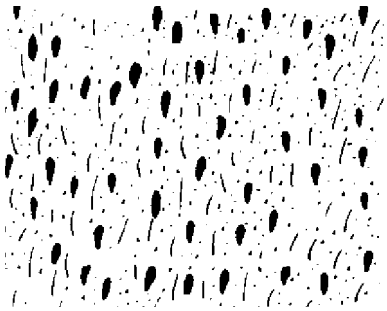
. 8

8(7) Scale hairs sparse on at least abdominal segments I-IV

. 9



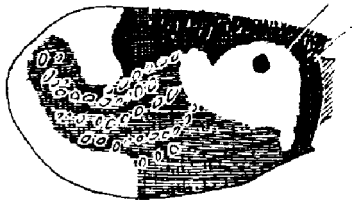
Scale hairs abundant on abdominal segments I and II
. 10



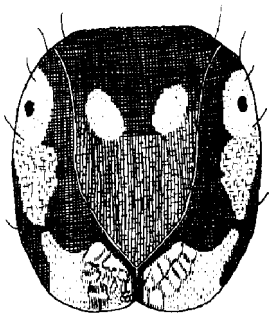
9(8) Frontoclypeus brown with large anterolateral, tear-shaped yellow spots; genae with numerous dorsolateral brown muscle scars
. . . . . *H. decalda*

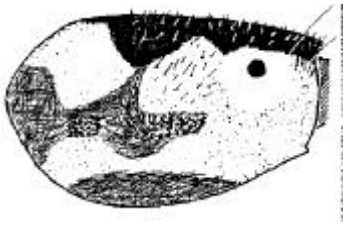
Frontoclypeus brown with tranverse yellow band anterior to anterolateral pale yellow spots; genae with dorsolateral pale yellow muscle scars
. . . . . *Hydropsyche* sp.

10(8) Frontoclypeus with 2 pairs of yellow spots, 1 pair located centrally, and 2nd pair anterolateral to lst pair, often fused to form large, diagonal streaks on anterior portion of sclerite, posterior half of sclerite mottled; in lateral aspect, dark area behind eye with 3 to 4 horizontal rows of yellow muscle scars curved dorsad posteriorly, dark pigment behind eye contiguous with dark pigment on venter of head . . . . . *H. venularis*



Frontoclypeus with single pair of centrally located spots, posterior half of sclerite solid brown, not mottled; in lateral aspect, area behind eye as in figure below . . . . . *H. rossi*





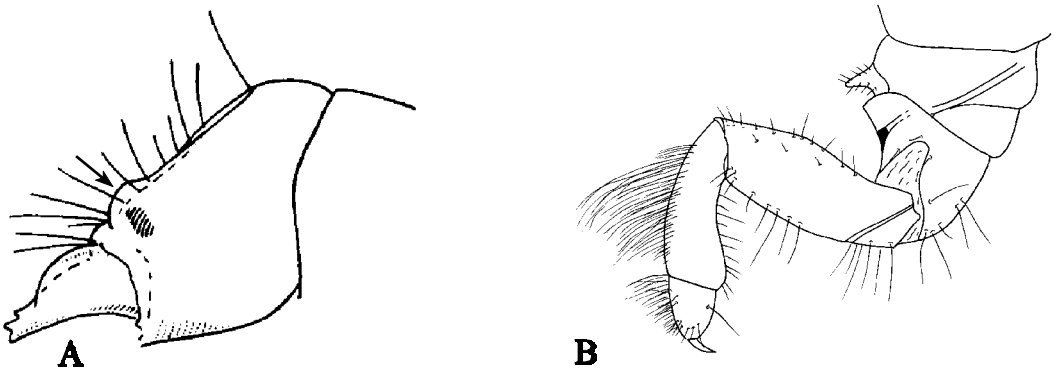
* key and figures to *Hydropsyche* species modified from Schuster and Etnier (1978).
** key does not include *H. alabama, H. alvata,* or *H. orris.*

Genus ***Macrostemum*** (Pictet)

DIAGNOSIS: Larvae of *Macrostemum* with distinctively flat head with U-shaped carina; pair of sclerites at base of labrum; and gills with up to 40 filaments attached to common stalk (see figure in key to genera). Larval case consisting of feeding chamber and retreat compartment.

NOTES: *Macrostemum* includes three species in North America, but only *M. carolina* is represented in Florida. *Macrostemum carolina* is morphologically distinguished from the other North American *Macrostemum* species by having a large tubercle near each eye (fig. A below). Larvae of the genus have dense brushes of setae on the prothoracic tibia and tarsus (fig. B below), which are used to clean food from their capture net. Wallace and Sherberger (1974) aptly

described the larval case of *M. carolina* and discussed the functions of the food and retreat chambers.



FIGURES: A. (Ross, 1944) - *Macrostemum carolina*, lateral view of head; B. *Macrostemum carolina*, prothoracic leg.

Like the other hydropsychid genera found in Florida, *Macrostemum* spp. live in a wide variety of lotic habitats, but are mostly found in large rivers. We found the larvae of *M. carolina* to be most abundant in areas where snags and submerged tree limbs abound, and such habitat preferences may have something to do with their retreat construction behavior.

ADDITIONAL REFERENCES: Ross (1944); Wallace and Sherberger (1974); Unzicker, Resh, and Morse (1982).

Genus ***Potamyia*** Banks

DIAGNOSIS: Larvae of *Potamyia* morphologically distinguished from other hydropsychid genera by prominent anteromedian projection on ventral apotome of head; entire posterior margin of each sclerite on abdominal sternum IX; and prominently flanged lateral border of each mandible (see figures in key to genera).

NOTES: *Potamyia flava* is the only known species of *Potamyia* in North America. The species is rare in Florida, and has been collected only from small sand-bottomed streams in the steep ravines that dissect the eastern banks of the Apalachicola River near Bristol. The species, normally associated with large rivers, has probably invaded the ravine streams from the Apalachicola River. The life history of the species in Florida is unknown. We have collected the adults in the months of April and August. *Potamyia flava* has been observed to have either a univoltine (Hilsenhoff, 1975) or bivoltine life cycle (Fremling, 1960).

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982).

FAMILY HYDROPTILIDAE

The Hydroptilidae, or microcaddisflies, include the smallest of the caddisflies, most members being 2-3 mm in length. In North America there are 14 genera with nearly 250 species (Morse, 1993). In Florida, the family is represented by as many as seven genera and at least 48 species (See Appendix A).

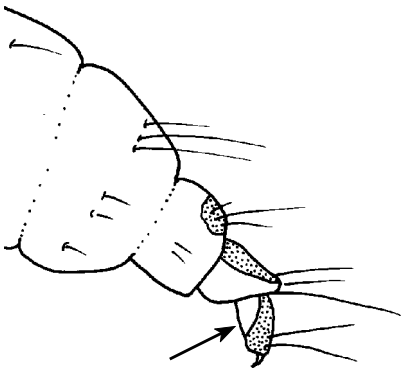
In addition to their small size, hydroptilids are recognized by the presence of sclerotized plates on all thoracic nota and lack of gills on the abdominal segments (fig. 2A, 3C in family key). [Note: larvae of *Hydroptila* have three, very thin filamentous gills on the posterior end of the abdomen].

The life cycle of the Hydroptilidae is unusual among caddisflies in that the first four larval instars are free-living, with case construction taking place in the final instars. Case type and construction material are variable and may be diagnostic for a genus.

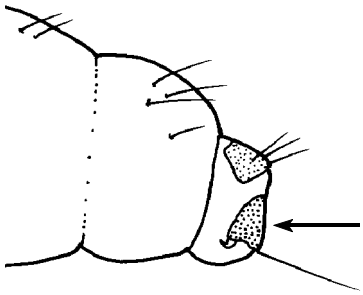
Hydroptilids occur in a wide array of lotic environments from small springs and seeps to large streams and rivers. Many species are also found in standing waters, including ponds, marshes, lakes and reservoirs, with some genera being more predominant in such environments. Larvae occur on variety of substrates, including submerged vegetation and algae, root masses, as well as rocks, sand and gravel, but are easily overlooked because of their size. Most microcaddisfly larvae feed on algae, either by grazing on diatoms and periphyton or by piercing filamentous forms.

KEY TO GENERA FOR FINAL INSTAR LARVAE OF FLORIDA HYDROPTILIDAE

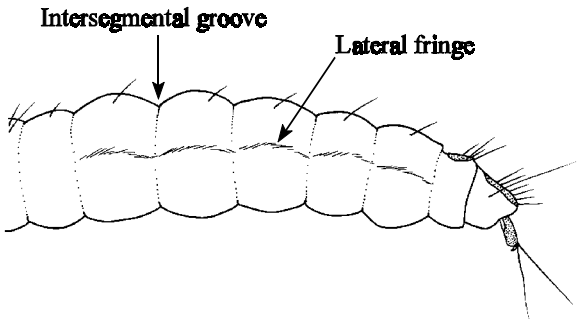
1. Anal prolegs elongate and cylindrical, projecting well beyond abdomen; head narrowing anteriorly in dorsal aspect (figure 2A in family key) 2

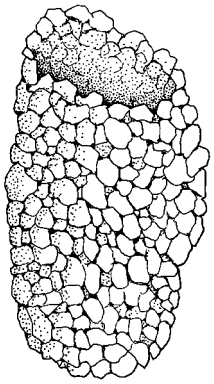


Anal prolegs short, not projecting conspicuously beyond abdomen; head not noticeably narrowing anteriorly in dorsal aspect
. 3

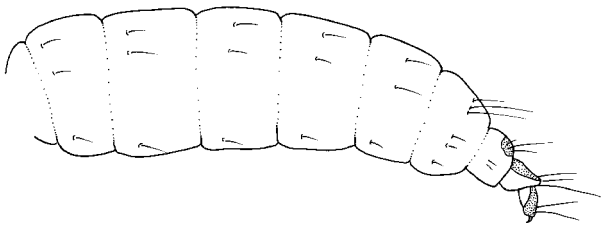


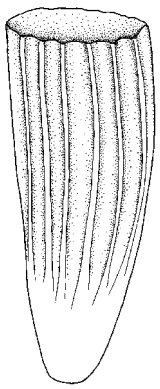
2(1) Abdomen with lateral fringe of hair; intersegmental grooves of abdomen prominent; cylindrical case of sand or sometimes plant pieces
. . . . . *Neotrichia*



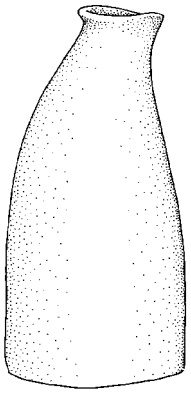


Abdomen without lateral fringe of hair; intersegmental grooves of abdomen not prominent; case of silk, often with longitudinal ridges
. . . . . *Mayatrichia, M. ayama*



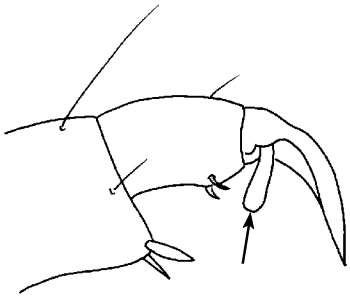


3(1) Middle and hind legs over twice as long as foreleg; bottle-like case constructed of silk . . . . . *Oxyethira*

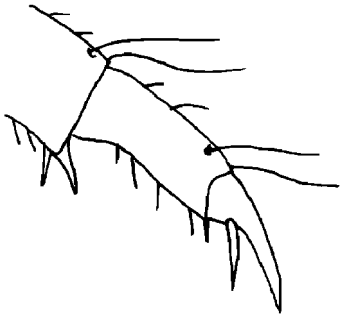


Middle and hind legs similar in length to forelegs; purse-like cases of sand or silk, sometimes mixed with plant material
. 4

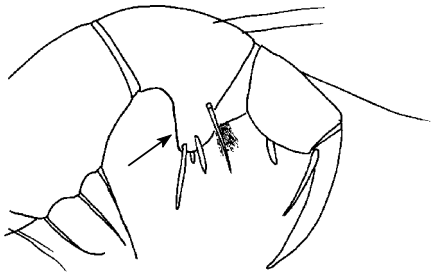
4(3) Tarsal claws stout with thick, blunt spur at base; case almost entirely of silk
. . . . . *Stactobiella*



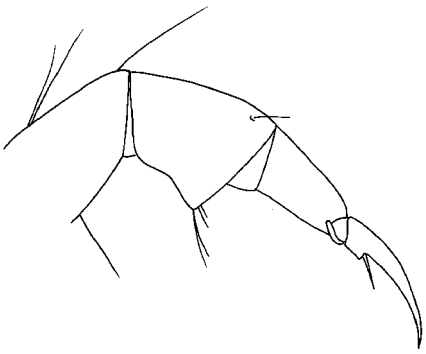
Tarsal claws slender with thin, pointed spur at base; case of sand or silk, sometimes mixed with plant material
. 5

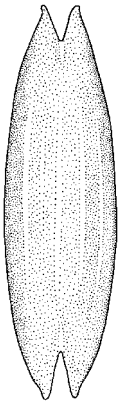


5(4) Tibia of foreleg with prominent, posteroventral lobe; middle and hind legs thickened; case of sand, sometimes mixed with plant material 6

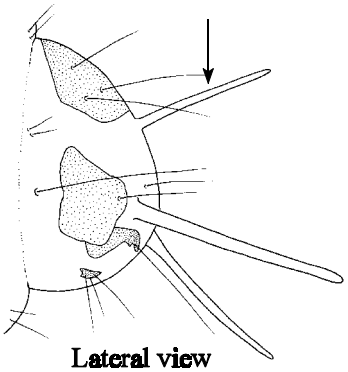


Tibia of foreleg without prominent, posteroventral lobe; middle and hind legs slender; case entirely of silk, with prominent longitudinal ridges . . . . . *Orthotrichia*

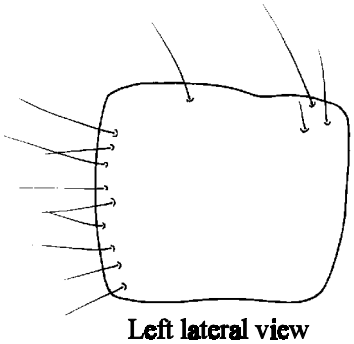




6(5) Three filamentous gills arising from posterior end of abdomen; anterior edge of meso- and metathoracic plates square at lateral edges . . . . . *Hydroptila*

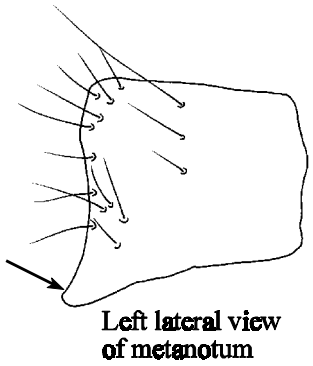


Lateral view



Left lateral view of metanotum

Posterior end of abdomen without filamentous gills; anterior edge of meso- and metathoracic plates lobate at lateral edges
. . . . . *Ochrotrichia*



Genus ***Hydroptila*** Dalman

DIAGNOSIS: Larvae of *Hydroptila* characterized by three long, thin gills arising from posterior end of abdomen (see figure in key to genera). *Hydroptila* and *Ochrotrichia* similar in overall appearance and in construction of purse-like cases of sand, sometimes with plant materal mixed in. In addition to apical abdominal gills, *Hydroptila* distinguished from *Ochrotrichia* by lack of anterolateral lobes on meso- and metanota (see figure in key to genera).

NOTES: The genus *Hydroptila* is likely the most speciose genus of microcaddisflies in Florida, as is the case in North America. The genus inhabits a wide variety of habitats from small streams to large rivers and most lentic environments. All instars feed on filamentous algae (Nielsen, 1948), as well as diatoms and other algae (Wiggins, 1977). Most microcaddisflies complete development in a year or less.

ADDITONAL REFERENCES: Ross (1944); Nielson (1948); Wiggins (1977); Unzicker, Resh, and Morse (1982); Morse (1982, In Press).

Genus ***Mayatrichia*** Mosely

DIAGNOSIS: Overall, larvae of *Mayatrichia* similar to those of *Neotrichia*. However, anterior narrowing of head more acute in *Mayatrichia* (see fig. 2A in family key) and legs shorter and less slender. *Mayatrichia* larvae also without lateral hair fringe found on abdomen of *Neotrichia* and intersegmental grooves less well-defined (see figure in key to genera). Cases of *Mayatrichia* cylindrical and made entirely of silk (see figure in key to genera).

NOTES: Larvae of *Mayatrichia* occur in a variety of streams and large rivers, often on rocks and gravel. Only a single species, *Mayatrichia ayama*, is reported from Florida. In Alabama, this

species occurred in small sandy streams and large rivers on the Coastal Plain and emerged from May through October (Harris et al., 1991). Larvae are characterized as algal scrapers by Wiggins (1984), although gut contents examined by Wiggins (1977) consisted of fine organic particles.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Neotrichia*** Morton

DIAGNOSIS: *Neotrichia* larvae, as with *Mayatrichia*, recognized by distal narrowing of head. Legs narrow and anal prolegs projecting free of body. Among smallest of hydroptilids, *Neotrichia* larvae separated from similar *Mayatrichia* by lateral fringe of hair on abdomen and well-defined intersegmental grooves of abdomen (see figure in key to genera). Cases of *Neotrichia* cylindrical and composed of sand grains or sometimes plant material (see figure in key to genera).

NOTES: Larvae occur in a variety of lotic habitats, including swift, rocky streams and slow-moving rivers. *Neotrichia* immatures are classified as algal scrapers on rocks and fixed substrates (Wiggins, 1984). Many of the *Neotrichia* species occurring in Alabama appeared to be multivotine (Harris et al., 1991).

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Ochrotrichia*** Mosely

DIAGNOSIS: Larvae of *Ochrotrichia*, in overall appearance, similar to those of *Hydroptila*. Both with short, rather thick legs, with foretibiae each bearing posteroventral lobe. *Ochrotrichia* larvae distinguished from those of *Hydroptila* by lack of apical, abdominal gills and presence of anterolateral lobes on meso- and metanota (see figure in key to genera). Cases of *Ochrotrichia* similar to those of *Hydroptila*, being purse-shaped and constructed of sand, sometimes with plant material mixed in.

NOTES: Only three species of *Ochrotrichia* have been reported from Florida. *Ochrotrichia tarsalis* is widespread, occurring in a wide variety of streams and rivers, but both *O. okaloosa* and *O. provosti* are restricted to cold, spring-fed streams of northern and central Florida. Larvae are characterized by Wiggins (1984) as detritivores and piercing herbivores, but Vaillant (1965) suggested some species are diatom scrapers on rock surfaces.

ADDITIONAL REFERENCES: Ross (1944); Vaillant (1965); Wiggins (1977); Unzicker, Resh, and Morse (1982); Morse (In Press).

Genus ***Orthotrichia*** Eaton

DIAGNOSIS: Larvae of *Orthotrichia* distinguished by combination of characters, including slender meso- and metathoracic legs, patch of spines on each fore coxa, and asymmetrical labrum. Silken larval case with longitudinal ridges distinctive for genus (see figure in key to genera).

NOTES: Only six species of *Orthotrichia* are known from North America and all are reported from Florida. Larvae are abundant on submerged vegetation along the littoral zones of lakes and other standing waters. The larvae also occur on vegetation along the margins of slow-moving rivers and streams. Nielson (1948) observed *Orthotrichia* larvae feeding on the contents of large algal filaments. In Alabama, *Orthotrichia* species had long emergence patterns suggesting multiple generations each year (Harris et al., 1991).

ADDITIONAL REFERENCES: Ross (1944); Kingsolver and Ross (1961); Morse (1975); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Oxyethira*** Eaton

DIAGNOSIS: *Oxyethira* larvae easily identified by long, thin meso- and metathoracic legs. Fore tibiae each also possesses elongate posteroventral process similar to that found in *Hydroptila* and *Ochrotrichia*. *Oxyethira* spp. also readily recognized by bottle-shaped, silken cases (see figure in key to genera).

NOTES: Larvae of *Oxyethira* are often abundant in lakes and other lentic environments, but they also occur in slower stretches of streams and rivers, particularly in beds of submerged vegetation. In number of species likely to be found in Florida, *Oxyethira* is second only to *Hydroptila*.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Kelley (1982); Unzicker, Resh, and Morse (1982); Morse (1982, In Press).

Genus ***Stactobiella*** Martynov

DIAGNOSIS: Thick tarsal claws of *Stactobiella* with large, blunt basal spurs (see figure in key to genera) unique among hydroptilids occurring in Florida. Blunt spurs easily discerned, being nearly as long as claws. Case purse-like and composed nearly entirely of silk (see figure in key to genera).

NOTES: The genus *Stactobiella* has not been reported from Florida, but both *S. palmata* and *S. martynovi* have been documented from adjacent Alabama counties (Harris et al., 1991). The genus would be expected to occur in the cool, spring-fed streams of northern Florida. Harris et al. (1991) reported *Stactobiella* spp. emerging early in spring through late summer.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982).

FAMILY LEPIDOSTOMATIDAE

The family Lepidostomatidae has two North American genera, *Lepidostoma* and *Theliopsyche*, but only the former is represented in Florida. The lepidostomatid larvae are morphologically distinguished from the the other caddisfly families by the placement of the antenna close to the anterior margin of the eye, and the lack of a median dorsal hump on abdominal segment I (fig. 18A in family key). The larval cases which are constructed from various materials are often four sided.

Genus ***Lepidostoma*** Banks

DIAGNOSIS: Larvae of *Lepidostoma* morphologically distinguished from other North American lepidostomatid genus, *Theliopsyche*, by having longer body length (approximately 10 mm), rounded dorsal profile of head, and ventral apotome of head as long as, or longer than, median-ecdysial line.

NOTES: The four species of *Lepidostoma* presently known to occur in Florida (See Appendix A) can be determined only from the adult stage. Adults of *Lepidostoma griseum* and *L. latipenne*, previously unknown from Florida, were collected along spring-fed streams within the Apalachicola ravines. We also collected *Lepidostoma* adults and larvae which may represent a new species, close to *L. serratum*, from seepage spring heads in Gadsden County. *Lepidostoma morsei* was described by Weaver (1988) in which the adult paratypes were collected in Walton Co., (Portland, Little Alaqua Ck). This species has not been collected from other areas of Florida and is considered a threatened species in Florida (Morse, In Press).

In North America the larvae of *Lepidostoma* have been collected from a wide variety of habitats ranging from small cool springs and streams, intermittent streams, backwater areas of rivers to wave-washed shores of lakes (Clifford, 1966; Anderson, 1976; Barton and Hynes, 1978; Unzicker et al., 1982). In Florida we have collected larvae of the genus only from small spring-fed ravine streams.

The life histories of the *Lepidostoma* spp. from Florida are unknown. According to Morse (In Press), species of the subgenus *Mormomyia,* in which *L. griseum*, *L. morsei*, and *L. serratum* are members, have the pupal, adult, and egg stages relatively short, the larval stage much longer, generally with a univoltine life cycle.

SELECTED REFERENCES: Ross (1944); Wiggins (1977); Unzicker, Resh, and Morse (1982); Weaver (1988); Morse (In Press).

FAMILY LEPTOCERIDAE

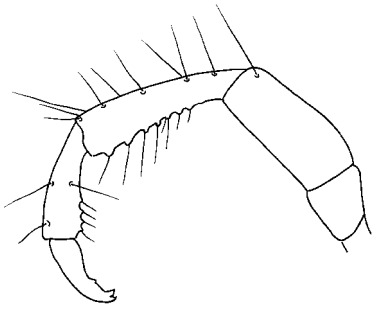
The Leptoceridae, a highly diverse family, are represented in Florida by six genera: *Ceraclea*, *Leptocerus*, *Nectopsyche*, *Oecetis*, *Setodes*, and *Triaenodes*. The larval taxonomy of the leptocerids is the most well known among the large caddis families in the state. Recent work on the larvae makes it possible to identify most of the approximately 50 Florida leptocerids to species level.

The larvae of Leptoceridae, commonly known as "long-horned caddisflies", can be distinguished from the other caddis families by the relatively long antennae which are at least six times as long as wide (fig. 4A in family key). The exception is *Ceraclea*, which have short antennae in some species, but may be identified by the dark curved lines on the posterior half of the mesonotum (fig. 4B in family key).

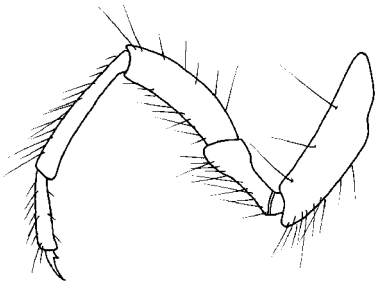
This family, along with Hydroptilidae, is the most geographically widespread and speciose in Florida due to the wide range of environmental tolerances its species exhibit in both lotic and lentic habitats. Many species are well adapted to inhabiting the warm waters so prevalent in the state. Leptocerids occupy a number of trophic groups depending on the genus, including carnivore, herbivore, detritivore and grazer. Larvae construct portable cases which are generally cylindrical and tapered. Case materials and structures vary among genera and species and are often used as diagnostic characters.

KEY TO GENERA FOR MATURE LARVAE OF FLORIDA LEPTOCERIDAE*

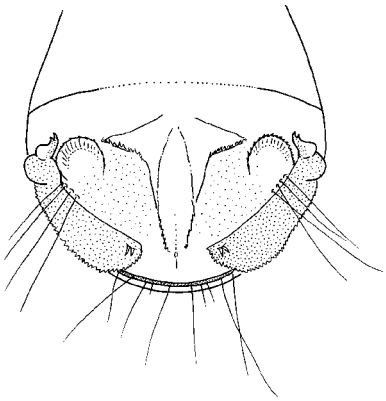
1. Tarsal claws of each mesothoracic leg hooked and stout; tarsus curved; slender case of transparent silk
. . . . . *Leptocerus, L. americanus*



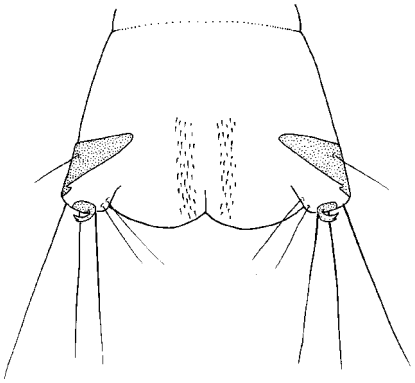
Tarsal claws of each mesothoracic leg slightly curved and slender; tarsus straight
. 2



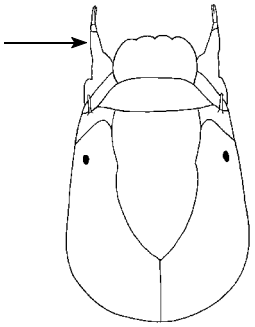
2(1) Sclerotized, concave plate with marginal spines on each side of anal opening and exiting onto ventral lobe; cylindrical case of stones . . . . . *Setodes* (p.75)

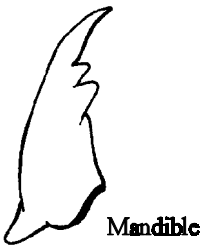


Sclerotized, spiny plates absent, although patches of spines or setae may be present 3

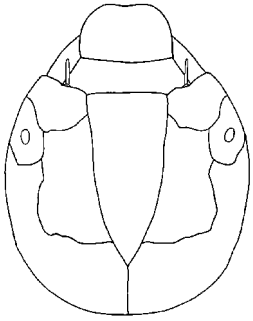


3(2) Maxillary palpi extending far beyond labrum; mandibles long and bladelike, with sharp apical tooth separated from remainder of teeth; cases of various types and materials . . . . . *Oecetis* (p. 68)



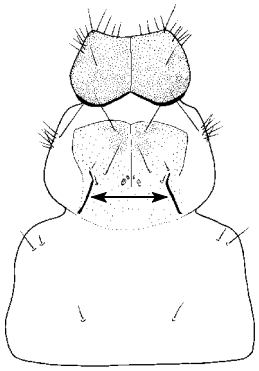


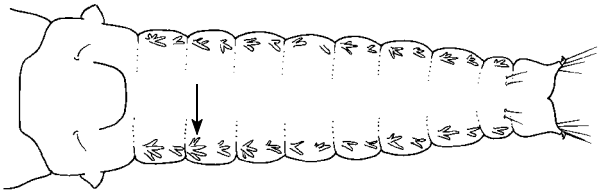
Maxillary palpi extending little, if any, beyond labrum; mandibles short, wide, with teeth grouped close to apex around central concavity
. 4



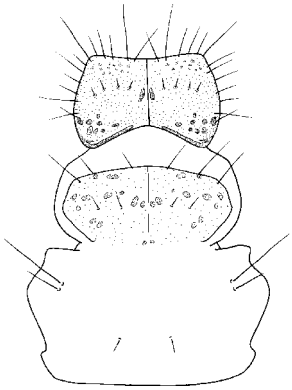

Mandible

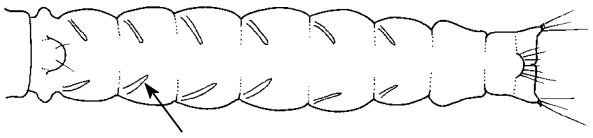
4(3) Mesonotum with pair of dark, curved bars on weakly sclerotized plates; abdomen broad basally, tapering posteriorly, with gills usually in clusters of 2 or more; cases of various shapes and materials, sometimes including spicules and pieces of freshwater sponges
. . . . . *Ceraclea* (p. 54)





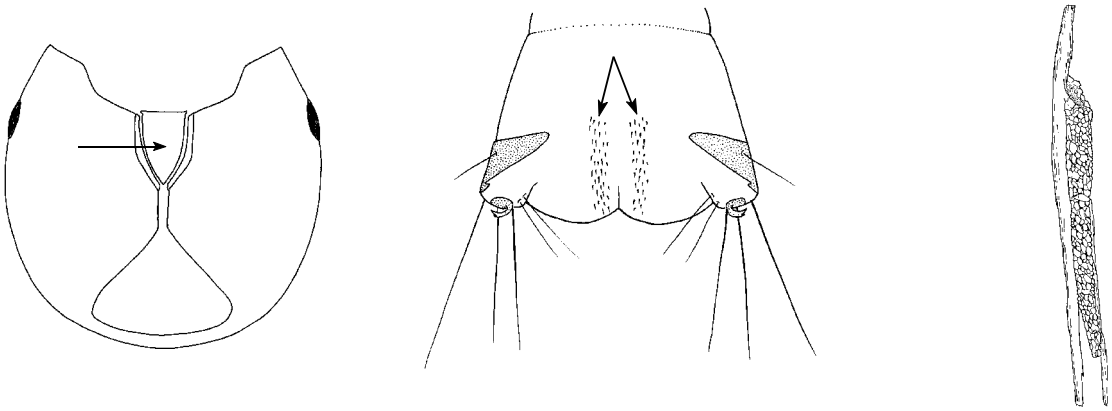
Mesonotum without pair of dark bars; abdominal segments I-VII more slender anteriorly, nearly parallel-sided, with gills single or absent
. 5





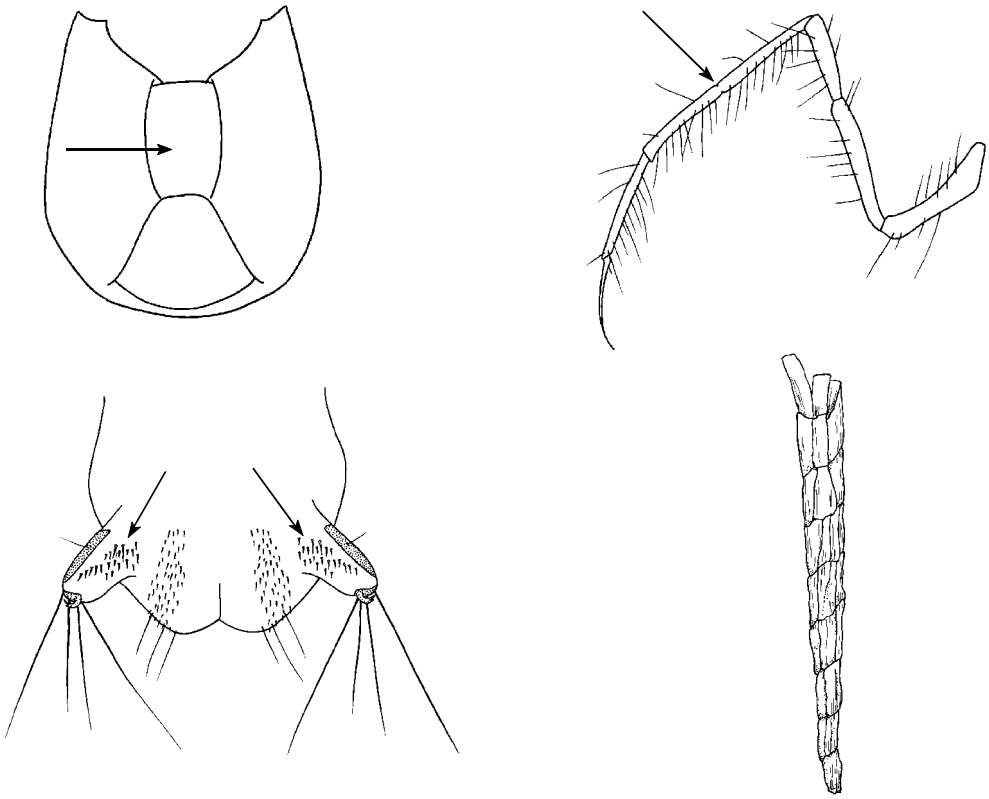
5(4) Ventral apotome of head triangular; tibia of each hind leg usually without apparent constriction; pair of ventral bands of uniformly small spines beside anal opening or spines absent in this position, but no lateral patches of longer spines; slender case of plant fragments, fine sand, and/or diatoms with usually 1 twig or conifer needle extending length of case and beyond at 1or both ends

. . . . . *Nectopsyche* (p. 62)



Ventral apotome of head rectangular, if triangular, case a spiral of plant pieces; tibia of each hind leg with translucent constriction, apparently dividing it into 2 subequal parts; patch of longer spines laterad of each band of short anal spines

. . . . . *Triaenodes* (p. 79)



* key to leptocerid genera adapted from Morse and Holzenthal (1984).

Genus ***Ceraclea*** Stephens

DIAGNOSIS: Larvae of *Ceraclea* distinguished from other leptocerid genera by presence of pair of dark curved bars on mesonotum (see fig. in generic key). Larvae stout bodied, widest at first abdominal segment and tapering posteriorly. Abdominal gills usually in clusters of two or more.

NOTES: Of the 35 species of *Ceraclea* known from North America, 13 have been recorded in Florida. Larvae of 10 of the 13 Florida species are known and can be identified to species using the key presented below. One species, *C. floridana*, is known only from the holotype specimen collected along Biscayne Bay in 1903 and has not been reported since. This species may now be extinct. *Ceraclea ophioderus* and *C. protonepha*, both of which occur in northern Florida, are the other species still unknown as larvae.

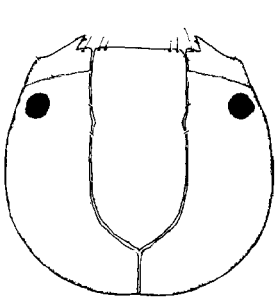
Feeding habits range from detritus and algal grazing to several species of *Ceraclea* (*C. resurgens, C. transversa, C. spongillovorax*) which feed on freshwater sponges (Resh, 1976; Resh et al., 1976). Case construction varies among species as to materials and architecture. Certain sponge-feeding species construct cases almost entirely of silk secretions, while other species incorporate mineral and plant materials to varying degrees into the silk matrix. Some species construct cornucopia-shaped cases while others construct cases which are stout and cylindrical. *Ceraclea flava* constructs a case with lateral expansions which form a dorsal awning.

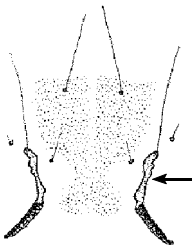
Ceraclea spp. are geographically widespread throughout the state and occur in a wide array of lotic and lentic habitats, although some species may be restricted to a narrow range of habitat types based on unique ecological requirements.

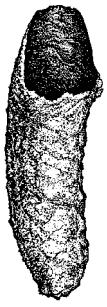
ADDITIONAL REFERENCES: Resh (1976); Unzicker, Resh, and Morse (1982).

KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *CERACLEA* * **

1 Parafrontal areas absent; antennae no more than 2 times longer than wide; mesonotal bars with anterior portion yellow; case made primarily of silk secretion, occasionally adorned with sand or pieces of freshwater sponge; sponge feeders 2

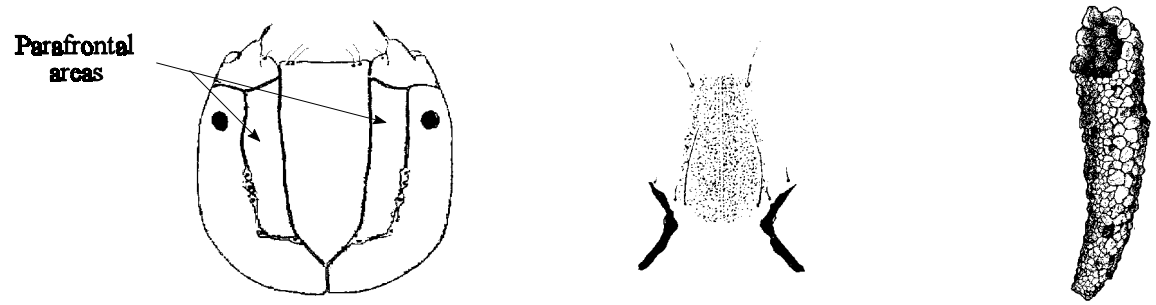






Parafrontal areas present; antennae ranging 2-8 times longer than wide; mesonotal bars unicolored; case made primarily of sand, pebbles, or plant material; usually detritus or algae feeders

. 3



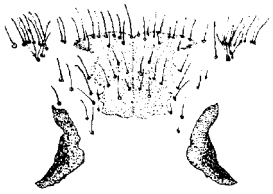
2(1) Pronotum lacking contrasting spots; head with spots pale yellow on a yellow background; length of last instar larva, 5-7 mm

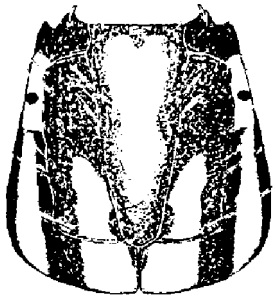
. . . . . *C. transversa*

Pronotum with some contrasting spots; head with brown spots on yellow background; length of last instar larva, 11-12 mm

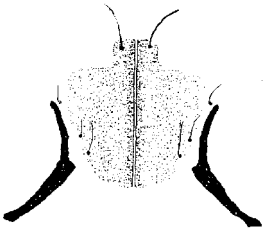
. . . . . *C. resurgens*

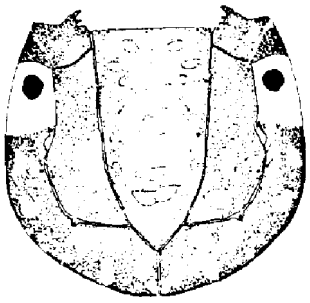
3(1) Mesonotum with at least 20 setae along middorsal groove; head with longitudinal stripes; trochantin with 2 or more dorsal setae
. . . . . *C. slossonae*





Mesonotum with only a few setae along middorsal groove; head lacking longitudinal stripes; trochantin with 1 dorsal seta
. 4

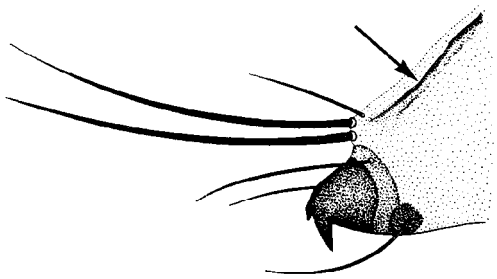




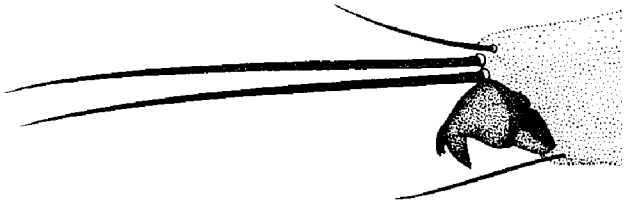
4(3) Two pairs of long setae on 9th abdominal tergite
. 5

One pair of long setae or setae lacking entirely on 9th abdominal tergite
. 9

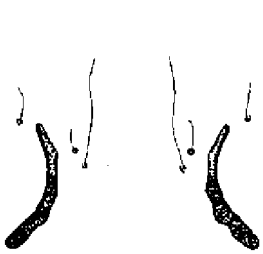
5(4) Dorsolateral sclerite on anal leg long and rodlike
. 6

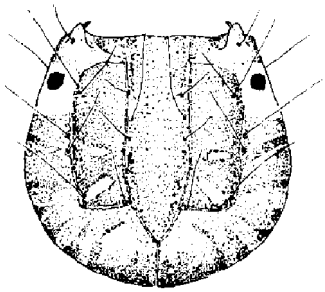


Dorsolateral sclerite not rodlike, or absent entirely
. 8

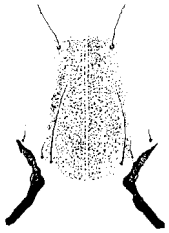


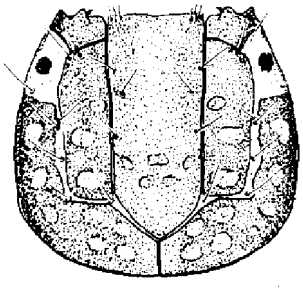
6(5) Mesonotal bars gently curved; head lacking contrasting spots posteriorly
. . . . . *C. cancellata*



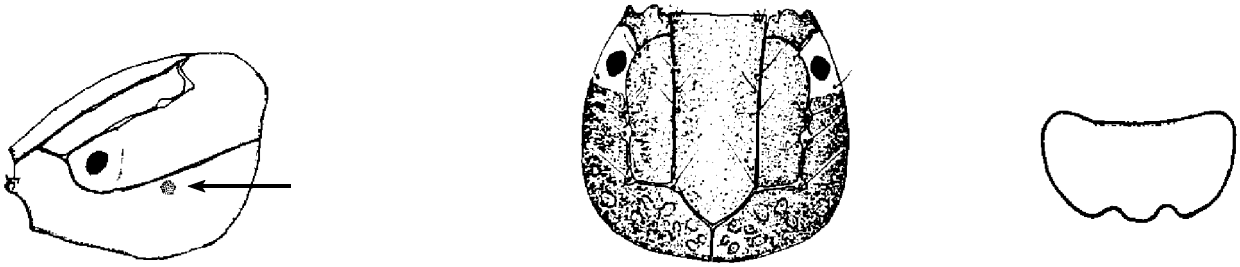


Mesonotal bars sharply angled; head with contrasting spots posteriorly
. 7

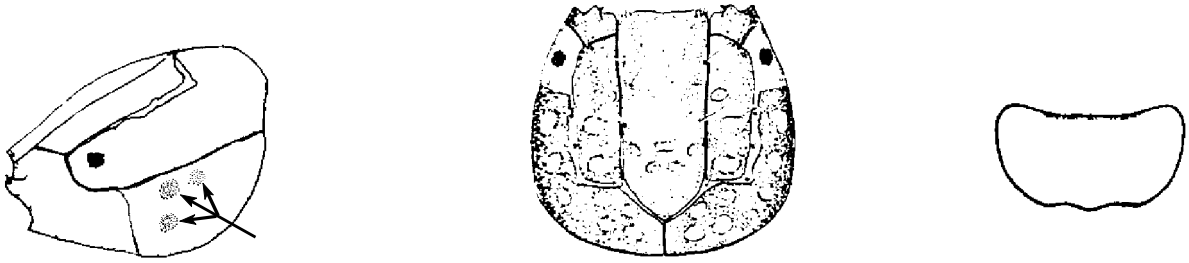




7(6) Head with only 1 lateral spot; frontoclypeus usually lacking spots; ventral apotome deeply indented; larvae found in association with freshwater sponge
. . . . . *C. spongillovorax*



Head with 3 lateral spots; frontoclypeus with contrasting spots; ventral apotome only slightly indented; larvae not found in freshwater sponge
. . . . . *C. maculata*



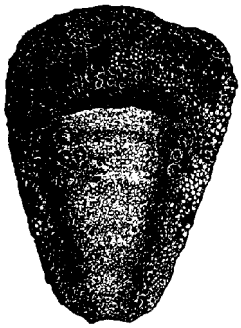
8(5) Case made of plant material
. . . . . *C. tarsipunctata*

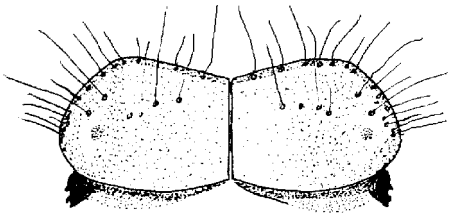
Case made entirely of sand grains

. . . . . *C. nepha, C. protonepha*?***

9(4) Case with lateral expansions; pronotum with single spot surrounded by a light corona laterally

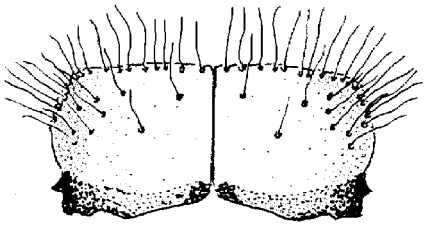
. . . . . *C. flava*





Case cornucopia-shaped, without lateral expansions; pronotum usually lacking a lateral spot

. . . . . *C. diluta*



* key and figures to *Ceraclea* species adapted from Resh (1976).

** key does not include *C. floridana* or *C. ophioderus.*

*** larva of *C. protonepha* is unknown but will likely key out to *C. nepha*.

Genus ***Leptocerus*** Leach

DIAGNOSIS: Larvae of genus *Leptocerus* distinguishable from other leptocerid genera by hooked tarsal claws with two apical points of mesothoracic leg and curved mesotarsi. Mesothoracic tibiae and tarsi each thickened, bearing ventral row of teeth with stout setae (see figure in key to genera). Larval cases long and slender, constructed of translucent silk (see figure in key to genera).

NOTES: Only a single species, *Leptocerus americanus*, occurs in North America. Ross (1944) provided a larval description for this species. The head and pronotum have many black spots (Fig. A below). The hind legs have dense swimming hairs; abdominal gills are absent.

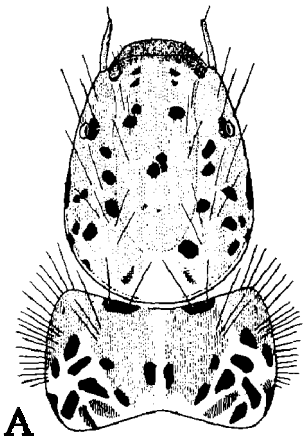


FIGURE: (Ross, 1944) - A. *Leptocerus americanus*, head and pronotum.

Leptocerus americanus is widespread across eastern North America. This species is known to occur in lakes and marshes as well as in slow stretches of river among aquatic macrophytes (Unzicker et al., 1982). Larvae are able to swim among aquatic plants, and the modified mesothoracic tibiae and tarsi are believed to enable the larva to hold firmly in a resting position on plants (Wiggins, 1977).

Leptocerus americanus has been reported from Osceola and Baker counties within the Osceola National Forest (Gordon, 1984). We have collected adults along sand-bottomed creeks in Gadsden County and have examined larvae from Lake Rowell, Bradford Co. Additional collecting in lentic habitats should provide a better understanding of its geographic distribution here in Florida.

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977).

Genus ***Nectopsyche*** Müller

DIAGNOSIS: Hind tibiae not secondarily subdivided as in *Triaenodes.* Sclerotized bar and circular roughened area on each lateral hump and unpigmented lines delimiting anterolateral corners of pronotum. Ventral apotome triangular.

NOTES: *Nectopsyche* larvae occur in lentic and lotic habitats throughout the state and, like most leptocerids, have a very broad range of environmental tolerances. In lentic habitats they are often associated with aquatic macrophytes. In lotic habitats they can be collected along the margins of slowly moving sections of streams and rivers. With the exception of *N. pavida*, larval cases are usually long and slender, made with sand grains and/or plant materials incorporated into the matrix. Stems or pine needles may be attached to the case extending beyond either end. *Nectopsyche pavida* builds a non-tapering case which is dorsoventrally compressed with uneven sides.

Nectopsyche candida, *N. exquisita*, and *N. pavida* are widely distributed and fairly common in small to medium size streams and rivers throughout much of Florida. *Nectopsyche pavida* also occurs in lakes of central Florida. *Nectopsyche spiloma*, widely distributed in the Mississippi River drainage, has not been recorded in Florida but very likely occurs in the state, based on adults collected near the Florida-Alabama state line (Harris et al., 1991).

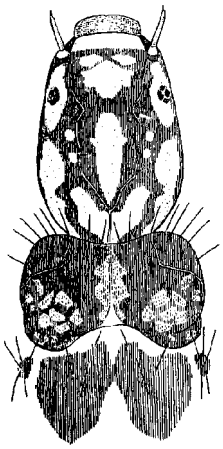
Nectopsyche tavara is endemic to lakes of peninsular Florida and has been recorded from Highlands, Lake, Levy, Orange, and Seminole counties. We have examined larvae collected from several lakes in Highlands Co., Lake Samson, Bradford Co., as well as larvae associated with *Najas* sp., collected from Lake Okeechobee, Glades Co. Adults of *N. tavara* have been reported to emerge from March to October, with peak emergence occurring in early July (Daigle and Haddock, 1981).

The larva of *N. paludicola* is unknown. Harris et al. (1991) reported that it is endemic to small coastal streams of Alabama and from the western portion of the Florida panhandle.

ADDITIONAL REFERENCES: Ross (1944); Haddock (1977); Daigle and Haddock (1981); Unzicker, Resh, and Morse (1982).

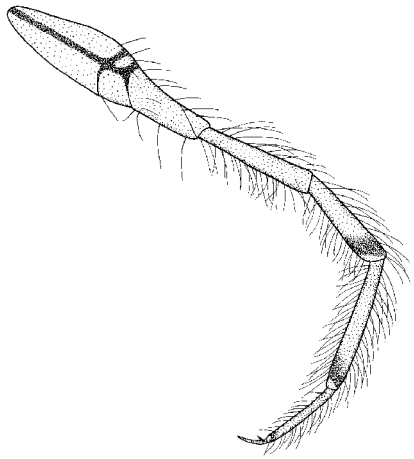
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *NECTOPSYCHE* * **

1. Conspicuous, oval, light brown marking present in median area of frontoclypeus; case dorsoventrally compressed, with uneven sides, made entirely of plant materials, such as leaf fragments
. . . . . *N. pavida*

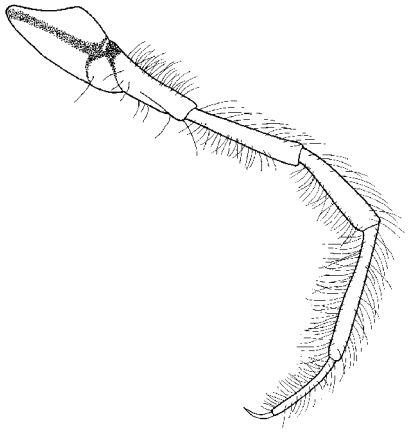


Conspicuous, oval, light brown marking absent from median area of frontoclypeus; case circular in cross section, gradually tapering posteriorly, with even sides, made of mineral materials (sand grains) and/or plant materials (fragments of stems)
. 2

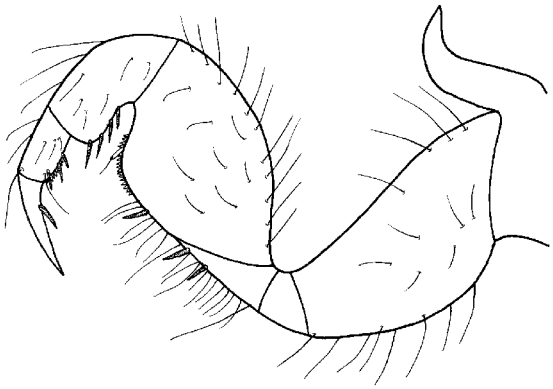
2(1) Meso- and metathoracic legs either entirely dark brown or black, or with conspicuous bands at junctions of segments
. . . . . *N. exquisita*



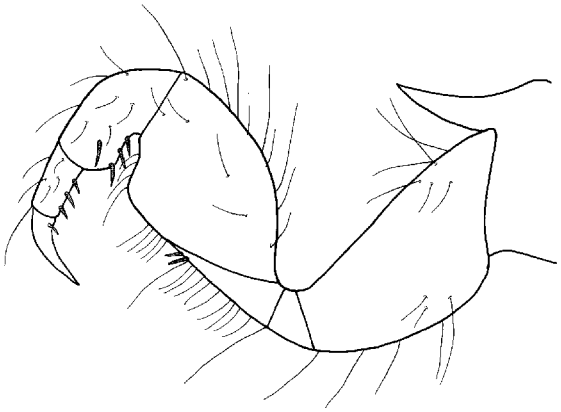
Meso- and metathoracic legs pale brown to light yellow 3



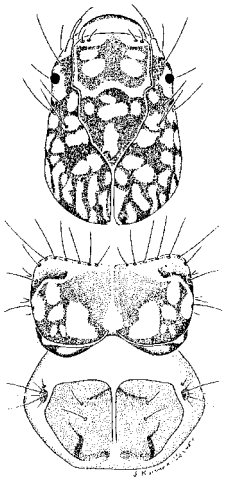
3(2) Prothoracic legs each with tibia having series of four spines on ventral margin, single spine on ventral margin of femur, and series of small crenulated spines apically on ventral margin of tarsus and femur; trochantin strongly upturned at right angle apically 4



Prothoracic legs each with tibia having series of three spines on ventral margin, 4th spine apically on inner margin, spines absent on ventral margin of femur, small crenulated spines absent on ventral margin of femur and tarsus; trochantin not strongly upturned at apex . . . . . *N. spiloma*

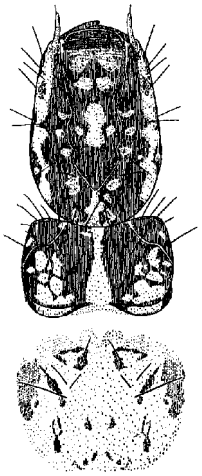


4(3) Frontoclypeus with medial transverse light stripe, anterior portion of frontoclypeus with lateral spots each connected as "figure 8"; dorsum of head with extensive light spots . . . . . *N. tavara*



Frontoclypeus without medial transverse light stripe, anterior portion of frontoclypeus with lateral spots each clearly separated; dorsum of head mostly brown with few light spots

. . . . . *N. candida*



* figures of *N. pavida* and *N. candida* from Ross (1944); figure of *N. tavara* from Daigle and Haddock (1981).

** key does not include *Nectopsyche paludicola*.

Genus ***Oecetis*** MacLachlan

DIAGNOSIS: *Oecetis* larvae easily distinguished from other leptocerid genera by long maxillary palpi which extend beyond labrum and long knife-like mandibles with sharp apical tooth separated from remainder of teeth (see figures in key to genera).

NOTES: Approximately thirty species of *Oecetis* occur in North America, north of Mexico, 18 of which are known or are likely to occur in Florida. Recent work done by Floyd (1994) provided descriptions and a larval key for 22 North American species along with notes on biology and distribution. Floyd's key covered 13 of the 18 Florida species, including three species believed to belong to the *Oecetis inconspicua* complex.

Larvae of *Oecetis* are strictly predaceous, as evidenced by their elongate bladelike mandibles, making them unique among Leptoceridae. They are highly diverse in terms of habitat preferences and have succeeded in exploiting nearly every type of aquatic habitat. Adults have been frequently collected in coastal areas, indicating that some species may be tolerant of brackish water (Floyd, 1994). Case construction is highly variable between species in terms of materials and architecture.

SPECIES NOTES:

Oecetis avara - This species is widespread across eastern North America, although previously unreported in Florida. Larvae we have examined were collected from a riffle area in the Chipola River, Jackson Co. *Oecetis avara* is easily distinguished by the two groups of micro-hooks present on abdominal segment I.

Oecetis cinerascens - One of the most commonly collected *Oecetis* species in Florida. It is widepread throughout the state and can be found in lentic and lotic environments including canals. Larvae are often associated with aquatic macrophytes. The brown head with pale muscle scars is distinctive and makes identification easy.

Oecetis daytona - Larvae are unknown. This species is endemic to the southeastern Coastal Plains and is listed as Rare in Florida (Morse, In Press). In Florida, adults have been reported from Baker, Duval, and Volusia counties (Gordon, 1984). It is likely this species also occurs in the western panhandle as adults have been reported in adjacent counties of Baldwin and Escambia counties, Alabama (Harris et. al., 1991).

Oecetis ditissa - Larvae are unknown. Adults have been reported from Alachua Co. (Gordon, 1984), and we have collected adults from Little Sweetwater Ck., Liberty Co.; Attapulgus Ck., Gadsden Co.; and Florida A&M farm stream, Gadsden Co.

Oecetis floridanus - Larvae are unknown. Morse (In Press) indicated this species is known from a unique type specimen collected along Biscayne Bay. The species should be renamed since it is preoccupied in *Oecetis* by *Oecetina floridana*, which was synonymised to *Oecetis cinerascens* (Holzenthal, 1982; Chen, 1993).

Oecetis georgia - Endemic to the southeastern United States. According to Floyd (1994), this species is strictly lotic, usually found on root mats and snags. Larvae are common in blackwater streams in northern Florida. Larvae most resemble *Oecetis persimilis* but, unlike those of *O. persimilis*, *O. georgia* larvae lack dark muscle scars on the head.

Oecetis inconspicua complex - Floyd (1994) presented sufficient evidence to support the notion that *Oecetis inconspicua* is actually a complex of species, which as adults are very difficult to distinguish but as larvae are morphologically distinct. Floyd (1994) associated seven different species with distinctive larvae which as adults fit the description of *Oecetis inconspicua*. The species complex theory is further supported by the fact that *Oecetis* spp. are widespread throughout North America and show a great deal of variation in terms of genitalic structure and overall size of the adults. It is likely that the number of species in the complex will grow. We have examined specimens which key only to *Oecetis inconspicua* complex but no further. It is very likely they represent another new species in the complex, but we cannot be sure until larva-adult associations are made. It is possible they are the larvae of one of the unassociated species.

> *Oecetis inconspicua* - The actual larval identity of *O. inconspicua* is unknown until further investigations and taxonomic revisions of member species is completed.
>
> *Oecetis* sp A - Floyd (1994) reported this species from only Alabama and South Carolina; however the species appears to be widespread throughout Florida. We have examined specimens from Escambia and Walton counties in North Florida as well as Desoto, Glades, and Hendry counties in South Florida. Larvae were collected from small to medium size rivers.
>
> *Oecetis* sp C - Floyd's (1994) larval associations were made from specimens collected from two small ponds in Clay Co. We have examined specimens collected from Lake Placid and Lake Grassy, Highlands Co. and Santa Fe Lake, Alachua Co. The species has not been reported from any states other than Florida. Larvae are easily distinguished by the dense patch of setae on the meso- and metasterna.
>
> *Oecetis* sp F - The larval association made by Floyd (1994) is based on specimens collected from Lake Tohopekaliga, Osceola Co. We have examined larvae collected from widespread localities that appear to be this species. However, there does seem to be a lot of variation in the number of setae on the metasternum (8-15), so it is possible this represents more than one species.

Oecetis morsei - Larvae cannot be distinguished from *O. sphyra* based on the associations done by Floyd (1994). This species is considered Rare in Florida (Morse, In Press) and has only been reported in Florida (as *Oecetis* n. sp.) from Ramer Branch in Eglin Air Force Base, Okaloosa Co., (Harris, et al., 1982).

Oecetis nocturna - This species is widespread throughout Florida and occurs in both lentic and lotic habitats. The larval case is easily recognized by the laterally attached ballast stones.

Oecetis osteni - Widespread throughout Florida, inhabiting both lentic and lotic habitats, often in association with aquatic vegetation. Larvae are easily recognized by the irregular darkened areas on the mesonotum.

Oecetis parva - Endemic to the southeastern United States, this species has only been recorded from Florida and Alabama. Floyd's (1994) larval-adult association is based on larvae collected from Lucas Lake, Washington Co., and were found attached to *Myriophylum laxum*. *Oecetis parva* is uncommon, and we were unable to collect nor borrow specimens for examination. Floyd (1994) indicated the larvae can be recognized by their small size, long antennae, and case structure.

Oecetis persimilis - Widespread and common throughout Florida as well as the eastern United States. Larvae occur in a wide array of lotic habitats. This species is morphologically similar to *O. georgia* but can be distinguished by the presence of dark muscle scars on the head.

Oecetis porteri - Endemic to the southeastern United States, this species has been reported from Florida, Alabama, and North Carolina. Floyd (1994) reported this species from numerous natural sand-bottomed lakes throughout much of Florida. We have examined specimens collected from Lake Josephine and Lake Clay, Highlands Co.; Santa Fe Lake, Alachua Co.; as well as specimens associated with *Eleocharis* sp. and *Utricularia* sp. collected from Lake Okeechoobee. Larvae are immediately recognizable by the reddish brown reticulations on the head and pronotum.

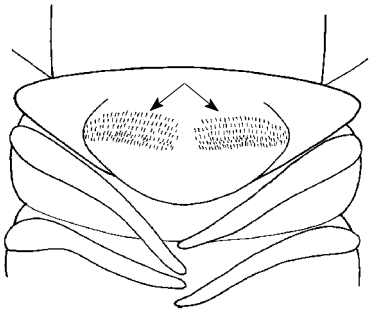
Oecetis pratelia - Larvae are unknown. This species is known only from the holotype specimen collected from Hendry Co., and described by Denning (1948a). Floyd (1994) believed this species may be extinct and was unable to collect the species from the type locality.

Oecetis sphyra - Widespread across North Florida, occurring in small to medium size rivers. The larval and case morphology are identical to *O. morsei* and separation of the two species is presently not possible.

ADDITIONAL REFERENCES: Ross (1944); Floyd (1994).

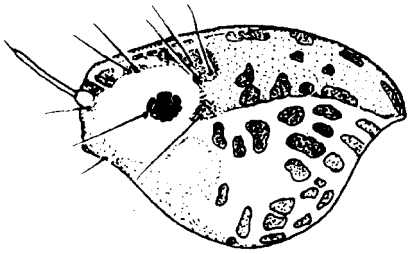
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *OECETIS* * **

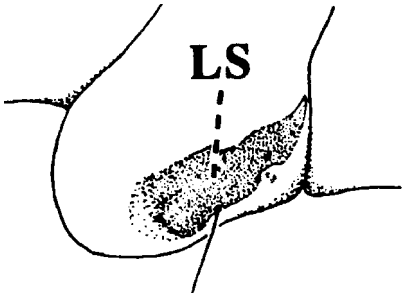
1. Dorsal hump of abdominal segment I with 4-6 rows of micro-hooks on each side . . . . . *O. avara*



Dorsal hump of abdominal segment I without micro-hooks 2

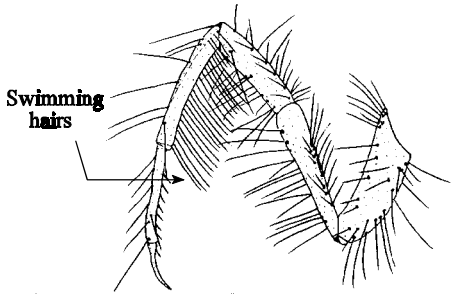
2(1) Postgenal sclerites separated by distinctive brown and pale areas; lateral hump of abdominal segment I with dark, elongate sclerite (LS) . . . . . *O. morsei/sphyra*



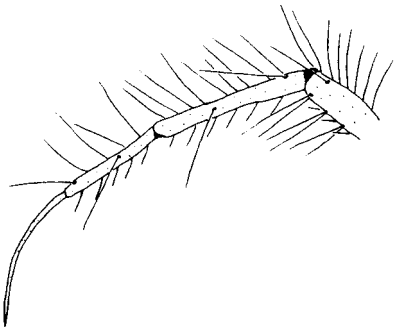


Postgenal sclerites not separated by dark and pale areas, shape of lateral sclerite of abdominal segment I variable 3

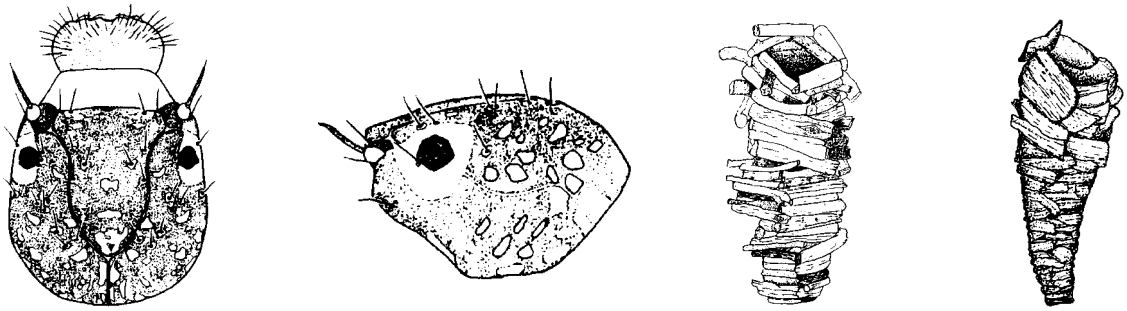
3(2) Metasternum with 2 setae; swimming hairs present on hind tibiae; hind tarsi longer than tarsal claws; case constructed of root or plant fragments placed transversely 4



Metasternum with more than 2 setae (except *O. osteni* which may have only 2), often with row of 10 or more; swimming hairs absent on hind tibiae; hind tarsi each as short as or shorter than its tarsal claw; case constructed of sand grains or irregularly placed plant or detrital pieces 6



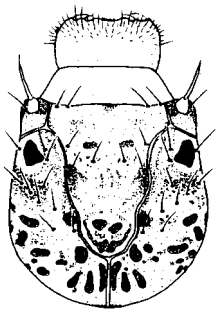
4(3) Head brown with light muscle scars; case constructed either of short twigs or roots (angled "log cabin" appearance) or thin, flat, quadrate, plant fragments; on vegetation in lakes, some slow-moving streams . . . . . *O. cinerascens*



Head yellow with dark muscle scars or pale; case exterior more rounded and often curved, especially in early instars; on roots, woody debris, and vegetation in streams 5

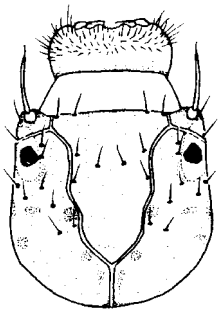
5(4) Head with scattered, well-defined muscle scars; antennae short, reaching posterior edge of labrum

. . . . . *O. persimilis*



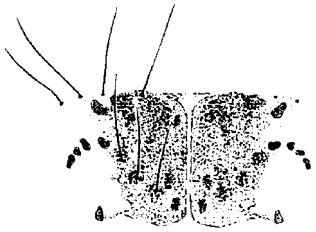
Head without dark, well-defined muscle scars; antennae longer, reaching to middle of labrum

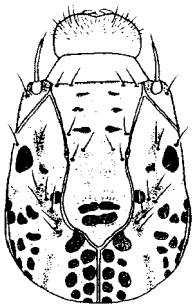
. . . . . *O. georgia*



6(3) Mesonotum with pair of irregular dark areas on each side of meson; coronal suture bordered by row of 3-4 dark muscle scars on each side; left mandible with deep crease running from apical tooth; case constructed of sand grains

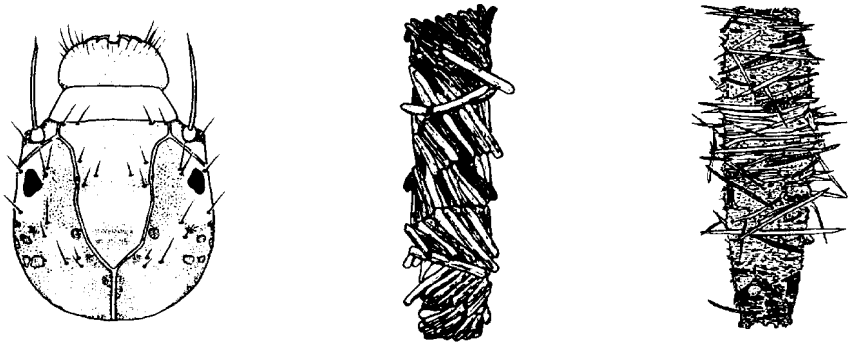
. . . . . *O. osteni*





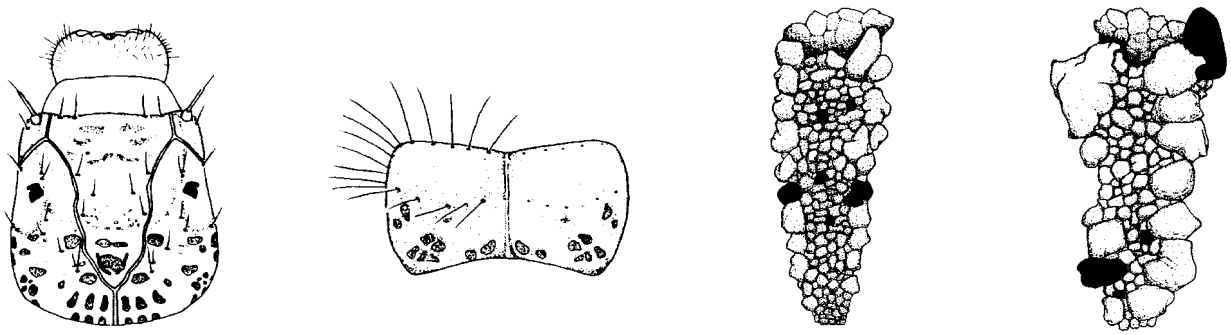
Mesonotum without distinct pair of irregular dark areas; coronal suture bordered by 0-2 muscle scars; left mandible without crease; case constructed of plant or sand grains
. 7

7(6) Antennae long, reaching at least to anterior edge of labrum; case as shown in figures; on vegetation in natural lakes
. . . . . *O. parva*



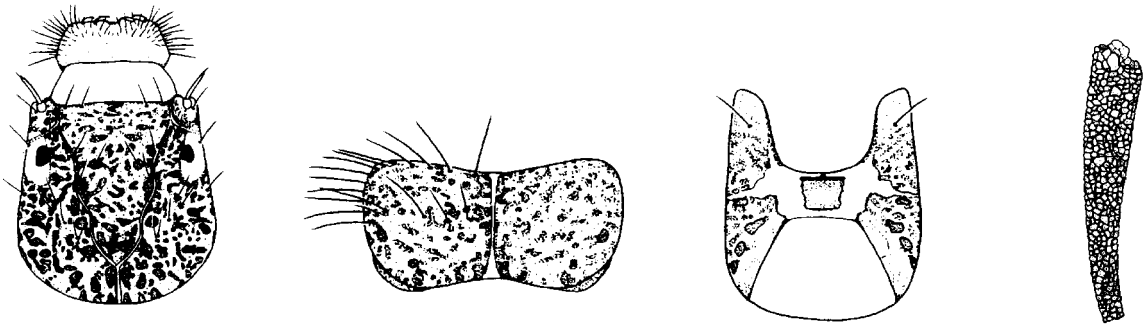
Antennae short, reaching only to posterior edge of labrum 8

8(7) Head and pronotum usually with several light brown muscle scars; case constucted of sand or rock pieces with larger ballast stones attached to the sides
. . . . . *O. nocturna*



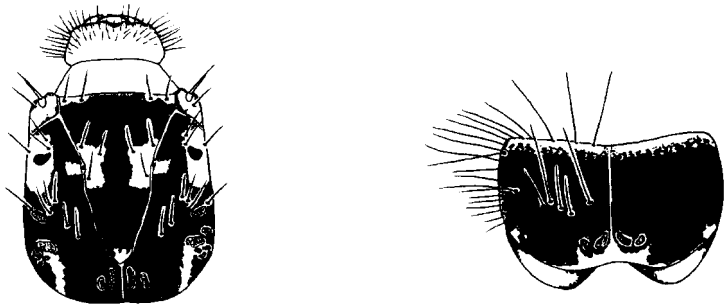
Head and pronotum pale or with various combinations of dark muscle scars, spots, or stripes; case constructed of variety of materials
. 9

9(8) Head and pronotum covered with dense, brown markings in addition to well-defined muscle scars; ventral apotome reddish-brown, subrectangular; case constructed of sand, curved, and with a very smooth exterior; sand-bottomed lakes . . . . . *O. porteri*



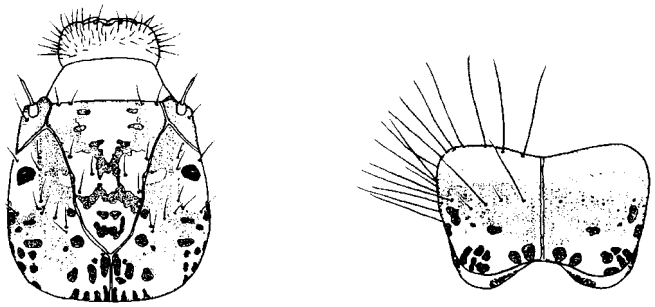
Head and pronotum with variable markings; ventral apotome variable; case constructed of sand or plant/detrital pieces; diverse habitats . . . . . *O. inconspicua* complex*** 10

10(9) Mesosternum with irregular patch of 80 to 100 setae; case somewhat flattened dorsoventrally, composed of sand; dorsum of hind legs dark brown; head and pronotum dark brown with pattern as shown in figure . . . . . *Oecetis* species C

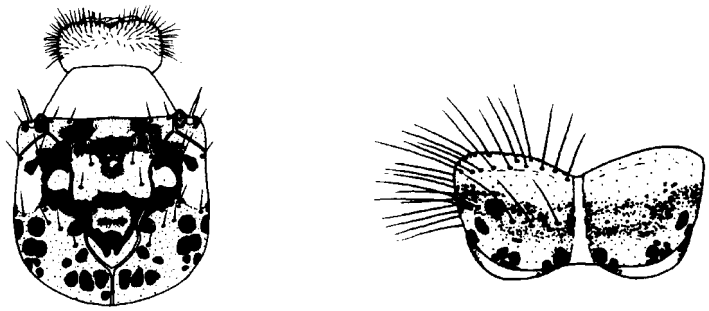


Mesosternum with no more than 6 setae; case tubular, composed of sand or woody debris; dorsum of hind legs same color as rest of leg; head and pronotum pattern not as above 11

11(10) Metanotum with no more than 4 sa3 setae; metasternum with row of 8-15 setae; head and pronotum as shown in figure; case constructed of sand
. . . . . *Oecetis* species F



Metanotum with 8-9 sa3 setae; metasternum with 30-36 setae; head and pronotum as shown in figure; case constructed of wood and bits of detritus
. . . . . *Oecetis* species A



* Key and figures to *Oecetis* species adapted from Floyd (1994).

** Key does not include *O. daytona, O. ditissa, O. inconspicua, O. pratelia*. Larvae of these species are unknown.

*** The actual number of species belonging to the *O. inconspicua* complex is unknown. It contains at least 7 North American species of which *Oecetis* species A, C, and F occur in Florida.

Genus ***Setodes*** Rambur

DIAGNOSIS: Larvae of North American species of genus *Setodes* distinguished from those of other leptocerid genera by presence of sclerotized concave plates with marginal spines on each side of anal opening (see figure in key to genera).

NOTES: Eight recognized species of *Setodes* are known to occur in North America. Previously, the genus has not been reported from Florida and was thought to extend its southerly geographic range only to Alabama and Georgia. We found that the genus is represented in the state by possibly three species: *S. guttatus*, *S. dixiensis*?, and *Setodes* n. sp.

Larvae of the eight North American species of *Setodes* have recently been described and a taxonomic key provided (Nations, 1994). Prior to that, only the larvae of *S. incerta* (=*incertus*) were known (Merrill and Wiggins, 1971). Nations (1994) found that there is little morphological variation among the larvae; however differences in head coloration and gill structure were deemed suitable characters for differentiating the species. The larval cases of the genus are cylindrical, generally straight, with little or no taper, and constructed of flat sand grains fitted tightly together. The posterior end of the larval case is open and without a sieve plate or other obstruction. Larvae are known to burrow into sand and are able to reverse their position within the case, hence the advantage of a non-tapering case which is open and essentially the same at both ends (Merrill and Wiggins, 1971).

Setodes spp. are primarily rheophilics and can be collected in pockets of sand on limestone shoals or from sand deposited on the leeward side of rocks in riffle areas. Larvae may also be found with their cases attached to stones by thick cords of silk (Nations, 1994). Nations (1994) surmised that this adaptation allows the larva to graze the surface of the stone effectively in the 360^{o} area around the point of attachment, while maintaining its position in rapid current via the anchor line.

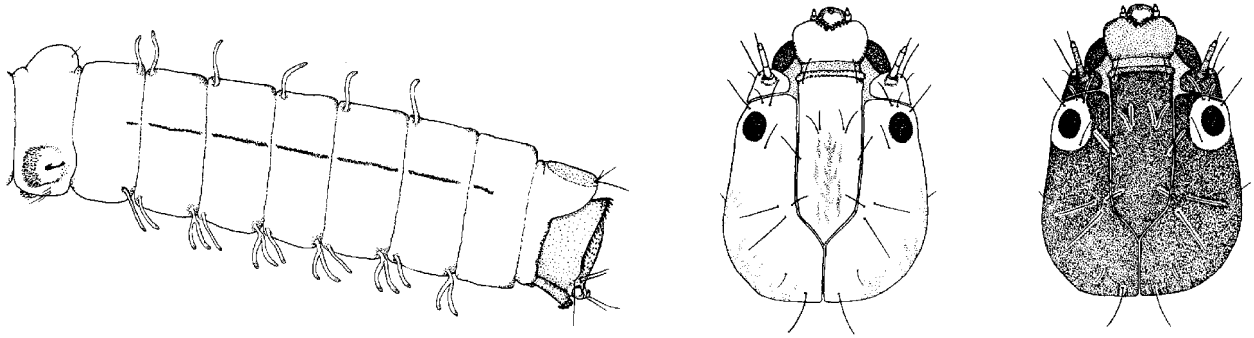
Setodes is herein reported for the first time in Florida and appears to be restricted to the Chipola River basin. All specimens that we have examined were either collected in the main river stem or from tributaries (Dry Creek and Rocky Creek, Jackson County). Adults of *Setodes* n. sp. were collected in large numbers along Rocky Creek and the Chipola River in the middle part of May.

A tentative key to Florida *Setodes* is presented below. The key is considered tentative since it is based on only 25 larvae; hopefully improvements can be made as more specimens are collected and examined. *Setodes* larvae with many dorsal gills can be confidently determined as *S. guttatus*. Larvae examined by Nations that key to *S. dixiensis*? were found to fit the description of *S. dixiensis* in Alabama, but some of the Florida specimens included a pair of dorsal gills on abdominal segment III, thus the uncertainty. Both *S. guttatus* and *Setodes* n. sp. have variable head coloration which includes a light and dark morph. *Setodes* n. sp. can be distinguished from *S. dixiensis* by the single pair of forked gills on the ventral surface of abdominal segment II.

ADDITIONAL REFERENCES: Merrill and Wiggins (1971); Wiggins (1977); Nations (1994).

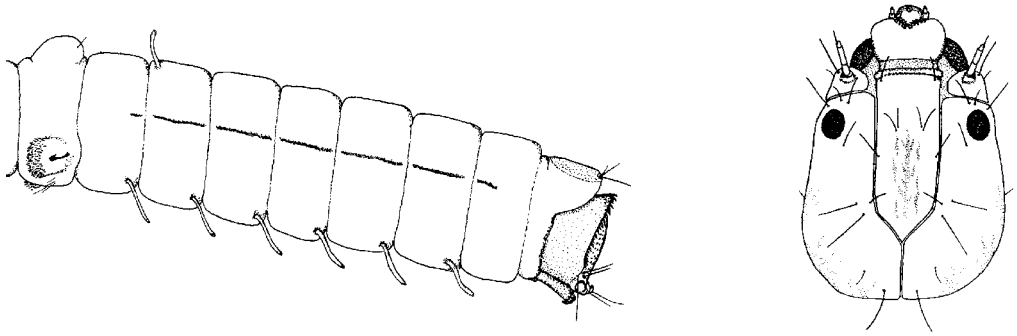
TENTATIVE KEY TO SPECIES FOR THE MATURE LARVAE OF FLORIDA *SETODES* *

1. One pair of forked or single gills on dorsal surface of abdominal segments 5-7 (and usually segments 2-4), and forked and single gills on ventral surface of abdominal segments 2-7; head tan or completely dark brown, with ring of lighter color around each eye spot
. . . . . *S. guttatus*



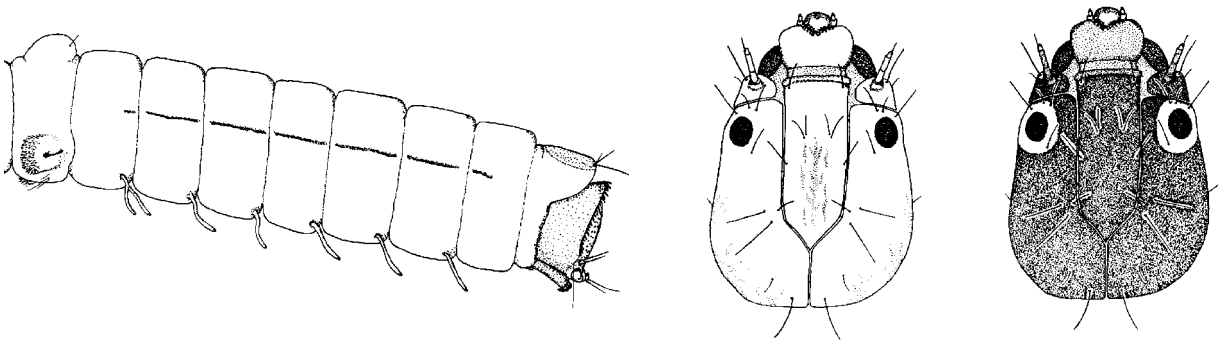
No more than one pair of gills on dorsal surface of abdomen
. 2

2(1) Single gills on ventral surface of abdominal segments 2-7, and sometimes one pair of single gills on dorsal surface of abdominal segment 3; head tan, perhaps with darker mottling or streaks
. . . . . *S. dixiensis?*



Forked gills on ventral surface of abdominal segment 2, and single gills on ventral surface of abdominal segments 3-7; head tan or completely dark brown with ring of lighter color around each eye spot

. . . . . *Setodes* n. sp.



* key and figures to *Setodes* species prepared by Victoria C. Nations.

Genus ***Triaenodes*** MacLachlan

DIAGNOSIS: Larvae of *Triaenodes* distinguished by following characters: ventral apotome of head rectangular, except in early instars where it may appear triangular; tibia of each hind leg with constriction near center; hind legs usually with dense fringes of long setae (swimming hairs) (see figures in key to genera), except in *T. perna* and *T. helo* in which setae not nearly as dense.

Larval cases of *Triaenodes* unusual among North American trichopteran genera, constructed of spirally arranged plant pieces; cases usually long and tapered with exception of *T. perna* and *T. helo* with cases only slightly longer than larvae and tapered only slightly.

NOTES: Twenty-three species of *Triaenodes* occur in North American with 16 of these known or likely to occur in Florida. The recent dissertation by James B. Glover (1993) at the University of Louisville on larval taxonomy and biology of *Triaenodes* has provided an excellent key to species for 19 of the 23 species. Larvae of 15 of the 16 Florida species have been associated and are presented in the key. Only the larvae of *T. smithi* of the Florida fauna has not been described.

Larvae occur in two basic habitats: submerged roots of riparian vegetation and aquatic macrophytes. They inhabit the full range of lotic and lentic environments. Successful collecting can be done by vigorously shaking or kicking root mats into a collecting net or hand screen. Aquatic plants can be sampled by sweeping a dipnet through the plants.

Glover (1993) reported that species found predominately in lotic roots show a tendency for parallel stripes on the dorsum of the head, reduced swimming hairs on the hind legs, and reduced abdominal gills. Lentic species occurring in macrophytes usually have spotted heads or heads with light brown lines, well developed swimming hairs, and well developed abdominal gills. Patterns of muscle scars and other pigmentation of the head and pro- and mesothorax, and chaetotaxy of the metathoracic legs are the most useful characters for species identification (Glover 1993). Case structure, while distinctive to the genus, varies little among different species. The case is constructed of spirally arranged pieces of aquatic macrophytes or the tips of roots

from riparian vegetation.

When larval cases are not available, *Triaenodes perna* and *T. helo* will run to *Mystacides* spp. using Wiggins's (1977) key to leptocerid genera. Both *Mystacides* and *T. perna/helo* have only scattered setae on the metathoracic legs and dark head coloration, thus the confusion. The two genera can be distinquished by examining the mandibles. *Triaenodes* spp. have asymmetrical mandibles, with the left mandible evenly convex along the entire outer edge and the right mandible concave on the outer basal portion and angled sharply inward. Mandibles of *Mystacides* spp. are symmetrical. All Florida material we have examined, that was identified as *Mystacides* spp., has been *T. perna/helo*. *Mystacides* spp. are unlikely to occur in Florida, since the geographic range of this genus extends south only to the lower Appalachians of Georgia and Alabama (Glover, 1993).

SPECIES NOTES:

Triaenodes abus - The sole Florida record is from Columbia Co. (Gordon, 1984).

Triaenodes flavescens - Considered a macrophyte species, found in both lentic and lotic habitats. We have collected larvae in aquatic macrophytes from the St. Marks River, Wakulla Co.

Triaenodes florida - Widespread in lakes throughout Florida, occurring among macrophytes. Glover (1993) reported collecting large numbers in emergent sedges and coontail (*Myriopyllum*) from Lucas Lake,Washington Co. Identification of this species is quite easy, as the black bands surrounding leg segments are distinctive. The case is light, long and tapered making this species an especially proficient swimmer (Glover, 1993).

Triaenodes furcellus - Endemic to peninsular Florida. We have examined larvae of this species collected from North Prong Alligator Ck., Charlotte Co.; Fisheating Ck., Glades Co.; and Lake Placid and Arbuckle Ck., Highlands County. Morse (In Press) listed this species as Threatened.

Triaenodes helo - Widely distributed across the state but uncommon. It has been reported from streams of Eglin Air Force Base (Harris et al., 1982); and Highlands Hammock State Park and an unnamed tributary of Six Mile Creek, Duvall County (Glover, 1993). *Triaenodes helo* is closely related to *T. perna* and positive identification of the larvae is still considered unresolved (Glover, 1993). However, Glover (1993) indicated that the head of *T. helo* usually has a strong mesal indentation along the posterior edge of dark pigmentation near the occipital foramen, while in *T. perna* the line of dark pigmentation is nearly straight.

Triaenodes ignitus - Probably the most widespread and common species in Florida, as well as North America. It is mainly a lotic root species which can occur in large numbers. Tolerant of a wide range of water quality conditions, this species has been collected in a wide array of lotic habitats, from small spring-fed streams to larger rivers such as the Suwannee and Apalachicola.

Triaenodes injustus - Widely distributed in the eastern U.S., although not commonly found in coastal areas (Glover, 1993). This species has not been reported within the state; however it is likely to occur, having been recorded from the Blackwater River basin, Covington Co., Alabama (Harris et al., 1991).

Triaenodes marginatus - Another species that probably occurs in North Florida, although we have not collected nor seen any record of it. It has been collected to a limited extent in southern Alabama, Apalachicola River Basin (Harris et al., 1991).

Triaenodes melacus - This species probably occurs in Florida, although there is no record of it. The species has been collected in southern Alabama where it occurs in cool, gravel-bottom streams and rivers (Harris et al., 1991).

Triaenodes new sp. A - Endemic to the southeastern United States, found primarily in small coastal blackwater streams and swamps of Alabama and the western portions of the Florida panhandle. According to Glover (1993), larval identification should be considered tentative until further associations have been done.

Triaenodes new sp. C - This species is known to occur only in North Carolina, South Carolina, and Florida (Glover, 1993). Although adults have been collected in Florida, larvae have not yet been reported.

Triaenodes nox - Probably widely distributed in North Florida but uncommon. It has been collected in aquatic macrophytes from Lake Miccosukee, Jefferson Co.; and the Escambia River Basin, Escambia Co., Alabama (Harris et al., 1991).

Triaenodes ochraceus - This species is not commonly found in Florida. We have collected larvae from the upper Aucilla River, Jefferson/Madison Co. and Attapulgus Creek, in Gadsden County. It has also been reported from an unnamed tributary of Six Mile Creek, Duval Co. (Glover, 1993).

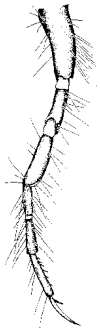
Triaenodes perna - Widespread in North Florida. It may be collected in roots of riparian vegetation from small streams to large rivers or swamps (Glover, 1993). This species lacks the dense fringe of swimming hairs, and the dorsum of the head is very black, like that of *T. helo*. Possible distinguishing characters are described under *T. helo.*

Triaenodes smithi - Present in the Blackwater and Chipola river basins in southern Alabama (Harris et al., 1991) and likely to occur in Florida. This is the only *Triaenodes* species thought to occur in Florida in which the larvae have not yet been associated with the adults.

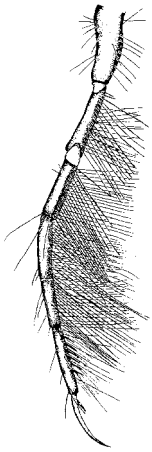
Triaenodes tardus - This species is more northern in its distribution and is uncommon in Florida. The extent of its presence in lakes of North Florida is unknown; sampling of macrophytes should provide more information on Florida distribution. The larval association, made by Glover (1993), is based on larvae collected along with a pharate male pupa from Lake Jackson, Leon Co.

KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *TRIAENODES* * **

1. Dorsum of head almost completely black; swimming hairs on rear legs reduced; antennae unpigmented; case usually only slightly longer than larva and composed of tips of rootlets of riparian vegetation
. . . . . *T. perna/helo*

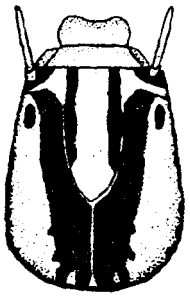


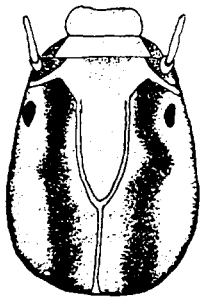
Dorsum of head not as above, marked with dark parallel stripes, muscle scars, or combination of both; swimming hairs usually well developed; antennae pigmented or unpigmented; case usually long and tapered, composed of rootlets or aquatic macrophytes
. 2



2(1) Conspicuous pattern of four inner muscle scars from occipital foramen to base of frontoclypeal suture on either side of coronal suture; other dorsal muscle scars often present 3

Dorsum of head capsule with inner muscle scars connected by dark pigment forming brown or black lines parallel with frontoclypeal and coronal sutures from subocular lines to occipital foramen; at most two inner muscle scars parallel to coronal suture but usually appearing light brown or lighter than background color 11

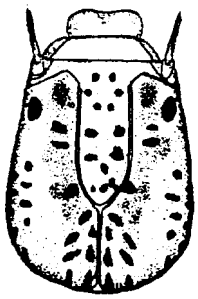


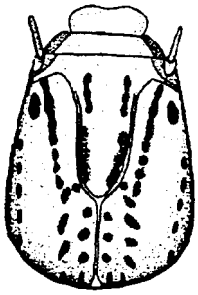


3(2) Dorsum of head with parallel black lines extending from subocular line posteriorly and parallelling at least part of coronal suture, gradually broken into muscle scars near occipital foramen; longitudinal black lines on frontoclypeal apotome well developed; antennae black, sometimes tipped in white 4

Dorsum of head without such black lines, although sometimes diffuse dark lines along outside of frontoclypeal sutures present but not encompassing coronal suture scars; head with pattern of muscle scars; without thick black longitudinal lines on frontoclypeus, although thin broken lines sometimes present; antennae pale, brown or black

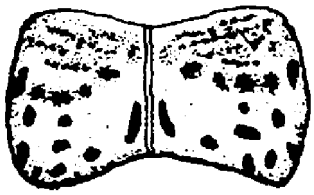
. 5





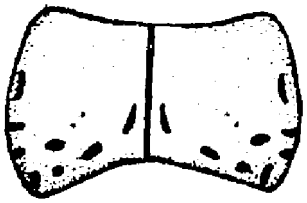
4(3) Ventral apotome appearing brown in places; anterior portion of pronotum also slightly pigmented

. . . . . *T. furcellus*

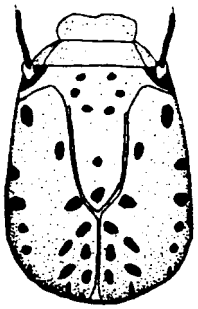


Ventral apotome pale, without pigmentation; anterior portion of pronotum pale

. . . . . *T. injustus*

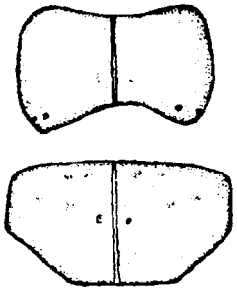


5(3) Legs with conspicuous black bands at joints; antennae dark black; case long and tapering, constructed of aquatic macrophytes
. . . . . *T. florida*

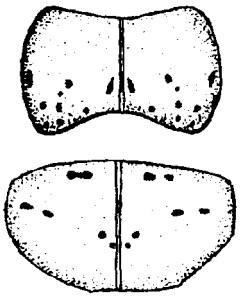


Legs without conspicuous black bands at joints; antennae black or pale
. 6

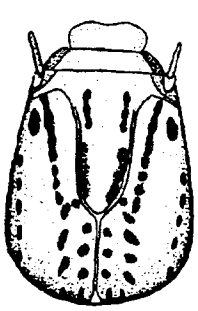
6(5) Muscle scars reduced on pronotum and mesonotum; antennae usually pale
. . . . . *T. tardus*

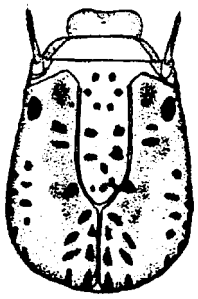


Muscle scars well developed on pronotum and mesonotum; antennae pale or dark
. 7

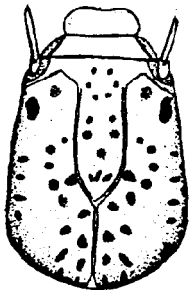


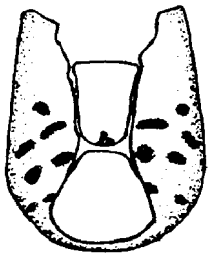
7(6) Head in dorsal view with parallel dark stripes along outer portion of frontoclypeal suture; scars never present at base of ventral apotome; antennae brown or sometimes black, base usually lighter than tip 8



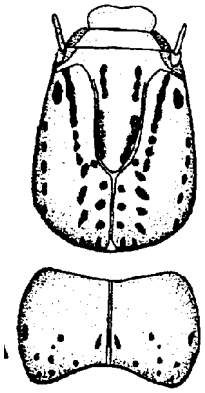


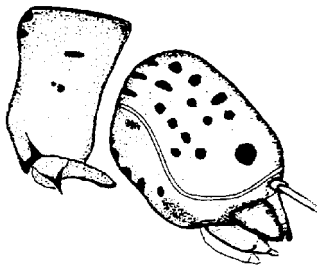
Head in dorsal view not as above; scars sometimes present at base of ventral apotome pigmentation of antennae variable 9



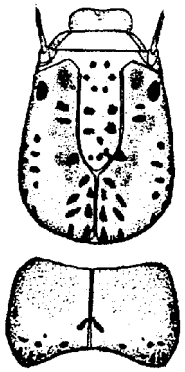


8(7) Parallel lines outside frontoclypeal sutures thin; frontoclypeal muscle scars usually coalesced to form thin parallel lines; pronotum background color uniform . . . . . *T. flavescens*, in part

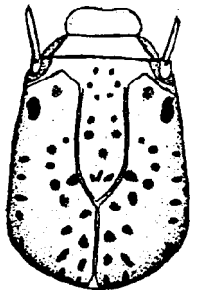


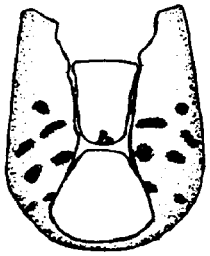


Parallel lines outside frontoclypeal sutures usually wide and diffuse; frontoclypeal muscle scars not coalesced; anterior portion of pronotum loosely pigmented
. . . . . *T. ochraceus*

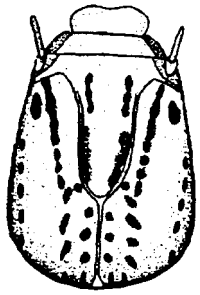


9(7) Head in dorsal view with series of five or six muscle scars in semicircle on each side of ecdysial line, first at midpoint of frontoclypeal suture and last where frontoclypeal suture joins coronal suture; antennae without pigmentation; muscle scars usually present at base of ventral apotome
. 10

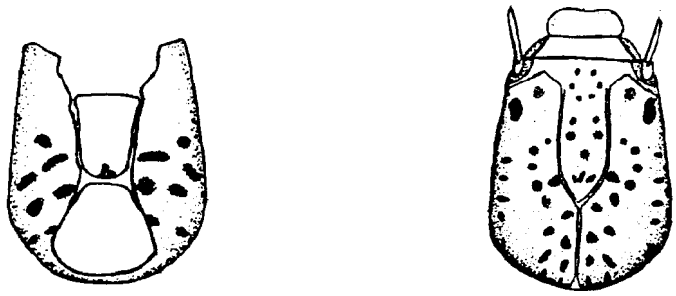




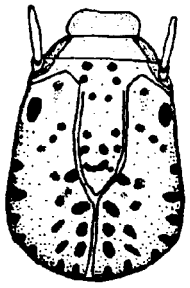
Head without semicircle of muscle scars; antennae usually lightly pigmented to black; muscle scars absent from base of ventral apotome
. . . . . *T. flavescens*, in part



10(9) Muscle scars present on ventral apotome; head pattern as in figure below; anterior fringe of tarsal swimming hairs absent from metathoracic legs
. . . . . *T. ignitus*



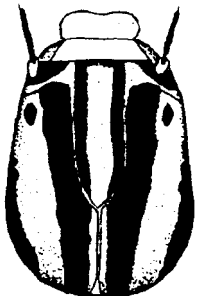
Muscle scars absent from ventral apotome; head pattern as in figure below; anterior fringe of tarsal swimming hairs present on each metathoracic leg
. . . . . *Triaenodes* new sp. A ?



11(2) Dorsal head stripes diffuse, not appearing to be sharply delineated, often appearing brown and having muscle scars parallel to coronal suture lighter than background color; pronotum often with pair of complete or incomplete longitudinal stripes; antennae usually pale
. 12

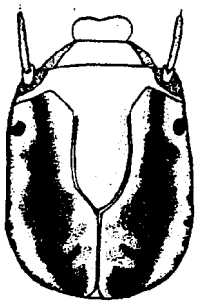
Dorsal head stripes black, dark, and well defined, without light muscle scars parallel to coronal suture; pronotum without longitudinal stripes; antennae usually black

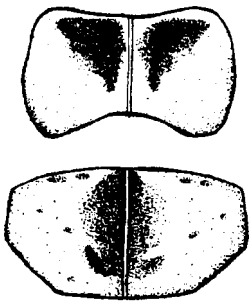
. 13



12(11) Dark stripes often covering most of dorsum of head; pronotum with pair of triangular patches of pigmentation anteriorly; mesonotum with large mesal region darkened

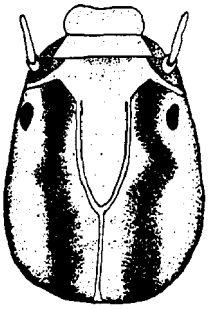
. . . . . *Triaenodes* new sp. C

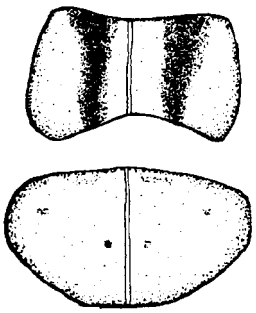




Dark stripes of dorsum of head narrower than above; pronotum usually with pair of complete longitudinal stripes; mesonotum without large region of pigmentation

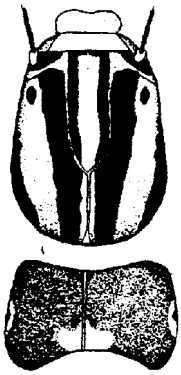
. . . . . *T. nox*





13(11) Pronotum nearly completely black, sometimes with small unpigmented area posteromesally

. . . . . *T. melacus*

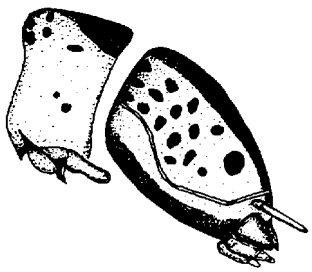


Pronotum light with muscle scars and sometimes small patches of pigmentation near anterior margin

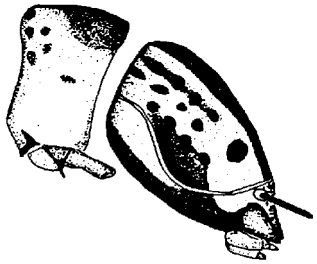
. 14

14(13) Postgenae with distinct muscle scars present; antennae pale or black

. . . . . *T. abus*



Postgenal muscle scars coalesced to form stripes; antennae black
. . . . . *T. marginatus*



* key and figures to *Triaenodes* species adapted from Glover (1993).

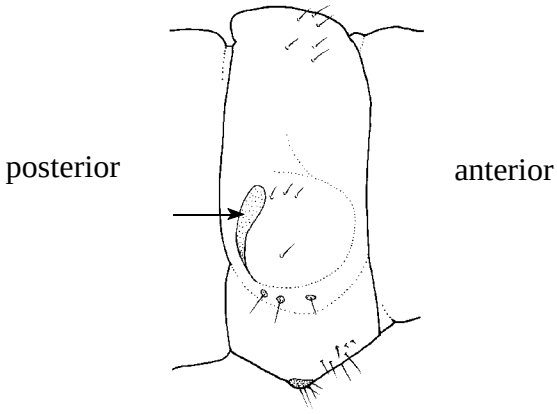
** key does not include *Triaenodes smithi.*

FAMILY LIMNEPHILIDAE

Considered the largest caddisfly family in North America, with approximately 52 genera and over 250 species, the Limnephilidae is represented in Florida by only two genera, *Ironoquia* and *Pycnopsyche*. The limnephilid larvae are distinguished morphologically by the following combination of characters: antennae located halfway between anterior margin of head capsule and eye (fig. 19D in family key); anterior margin of pronotum straight (fig. 19C in family key); prosternal horn not reduced (fig. 19D in family key); and basal seta of tarsal claw short, not extending to tip of claw. The larval cases are constructed of plant materials or rock fragments with rough or irregular texture. Limnephilid larvae live in a wide variety of lotic habitats ranging from temporary or permanent streams, springs, spring seeps, rivers, and lentic environments which include pools, ponds, marshes, swamps, and lakes (Unzicker et al., 1982).

KEY TO GENERA FOR MATURE LARVAE OF FLORIDA LIMNEPHILIDAE

1. Abdominal gills single or unbranched; lateral hump of abdominal segment I with one long sclerite adjacent to base, the sclerite sometimes only lightly pigmented but distinguishable by the smooth and relatively shinier surface
. . . . . *Pycnopsyche*



Most abdominal gills with multiple branching of up to 10-15 filaments; sclerite absent from area adjacent to base of lateral hump.
. . . . . *Ironoquia, I. punctatissima*

Genus ***Ironoquia*** Banks

DIAGNOSIS: Larvae morphologically recognized by multibranched abdominal gills, lack of sclerite adjacent to base of lateral hump, and meso- and metathoracic femora each with 5-7 major setae along ventral edge. The cylindrical larval cases are slightly tapered and curved, and constructed of either sand grains or pieces of plant materials.

NOTES: The larva of *Ironoquia punctatissima,* the only species of *Ironoquia* represented in Florida, was first described by Flint (1960). The larvae are characterized by the distinct dark spots and infuscations of the head and thoracic nota.

Ironoquia punctatissima appears to be uncommon in Florida; we have examined larvae from only two localities in the state: Ochlockonee River, near State Road 12 along the Leon/Gadsden county line, and St. Marks River, 1.5 km NE Chaires, Leon Co. Previously, one adult male specimen was collected from the Tall Timbers research station in Leon County and reported by Gordon (1984).

Little is known about the life history of *Ironoquia punctatissima* in Florida. The mature larvae were collected in February. The adult from Tall Timbers was collected in November. The species has been reported to have a univoltine life cycle in temporary streams (Unzicker et al., 1982), and adults have been collected in September in the Northeast (Flint, 1960) and in July to early October in North and South Carolina (Unzicker et al., 1982).

ADDITIONAL REFERENCES: Flint (1960); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Pycnopsyche*** Banks

DIAGNOSIS: Larvae of *Pycnopsyche* morphologically recognized by single and unbranched abdominal gills and presence of long sclerite adjacent to base of lateral hump on abdominal segment I (see figure in key to genera). Metanotal sa1 sclerites not fused (although often close together) along midline as in *Hydatophylax*. The variously shaped or occasionally 3-sided larval cases are constructed from twigs, leaves, sand, and gravel.

NOTES: Two species of *Pycnopsyche* are known to occur in Florida (*P. antica* and *P. indiana*). *Pycnopsyche antica* appears to be the most common of the two and has been reported from Leon Co. (Gordon, 1984), Gadsden and Okaloosa counties (Wojtowicz, 1982). *Pycnopsyche indiana* has been reported to occur in coastal plain blackwater streams, although the distribution in Florida is poorly understood.

Pycnopsyche scabripennis has also been reported to occur in Florida (Harris, 1982; Gordon, 1984); however, these identifications predated Wojtowicz's (1982) dissertation on *Pycnopsyche*, which included a revision of the *P. scabripennis* species complex, where he indicated that the species *P. scabripennis* southern most range is limited to the Virginias. Previous reports of *P. scabripennis* in Florida are very likely to be *P. antica*.

The previous report of *P. guttifera* in Florida by Gordon (1984) was in error. After a reexamination of *Pycnopsyche* adults reported by Gordon (1984) as *P. guttifera,* we discovered they had been misidentified and were actually *P. antica*.

The lack of reliable larval characters makes it very difficult to distinguish species of *Pycnopsyche*. Larval descriptions of *P. indiana* and *P. antica* by Wojtowicz (1982) indicated that these species cannot be reliably separated based on larval or case morphology. The case structure of *P. antica* and *P. indiana* is variable. *Pycnopsyche antica* constructs a case either of firmly attached wood pieces (see figure below) or of leaf fragments arranged to form a 3-sided case, or a combination of both. Likewise, the case structure of *P. indiana* is variable, composed either totally of plant material (similar to *P. antica*) or of a mix of plant and mineral materials (Wojtowicz, 1982).

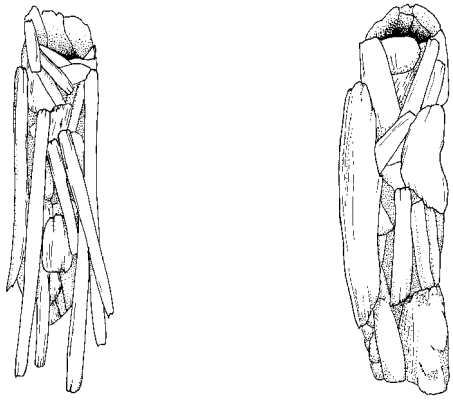


FIGURE: *Pycnopsyche antica*, larval cases.

Pycnopsyche appears geographically confined to the northern tier of the state. We have collected the larvae in moderate-sized streams (e.g., Burnt Mill Creek, Jefferson Co.) and medium-sized rivers (e.g., Aucilla and Econfina rivers, Taylor Co.; Chipola River, Jackson Co.) The larvae were collected with dipnets and Hester-Dendy plates near the shorelines of the streams and rivers where there was plenty of snags and other organic debris.

Except for the collection dates, the life history of *Pycnopsyche* in Florida is unknown. The adults of *P. antica* (identified as *P. scabripennis*) were collected along Rocky Creek, Walton Co., in November and December (Harris et al., 1982). Likewise, we collected adults of *P. antica* along the Apalachicola ravine streams, Liberty Co. in late October and early December.

ADDITIONAL REFERENCES: Ross (1944); Flint (1960); Wiggins (1977); Unzicker, Resh, and Morse (1982); Wojtowicz (1982).

FAMILY MOLANNIDAE

The family Molannidae is represented in the Nearctic Region by two genera, *Molanna* and *Molannodes*. The Florida fauna includes only the genus *Molanna*. The mature molannid larvae can be distinguished from other caddis families by the presence of reduced metatarsal claws (fig. 13A in family key) and case constructed of quartz pieces with a dorsal hood and lateral flanges (fig. 13 B in family key). Larvae are widespread across North Florida and occur in a wide range of lotic habitats.

Genus ***Molanna*** Curtis

DIAGNOSIS: Larva with tarsal claw of each metathoracic leg setose, and greatly reduced compared to those on fore- and mesothoracic legs; abdominal gill filaments have two to four branches; and tubular case with prominent lateral flange and dorsal hood over anterior end, giving case flattened appearance.

NOTES: The three species of *Molanna* in Florida include *M. blenda*, *M. tryphena*, and *M. ulmerina*. *Molanna blenda* is herein reported for the first time in the state. The larvae of both *M. blenda* and *M. tryphena* have been associated with the adults, while those of *M. ulmerina* are still unknown.

Sherberger and Wallace (1971) described the larvae of *M. blenda* and *M. tryphena*, and discussed their ecology and biology as well. The larvae of these species are distinguished morphologically by the development of the foretibial spine and the shape of the membranous frontal constrictions, as indicated in the following key to species. Both *M. blenda* and *M. tryphena* are lotic dwellers. Sherberger and Wallace (1971) indicated that larvae of *M. blenda* have been collected only in spring seeps and spring-fed streams with waters uniformly cool throughout the year, and larvae of *M. tryphena* occur in larger streams.

In Florida, we collected the larvae and adults of *M. blenda* from a small spring-fed stream in a ravine at the Florida A&M University Farm in Gadsden County. The water temperatures are relatively constant throughout the year, ranging from 17.5° - 20°C. The larvae were collected midstream where some snags and trapped organic debris were present. We also collected adults of *M. blenda* along the streams of the Apalachicola ravines in Liberty Co.

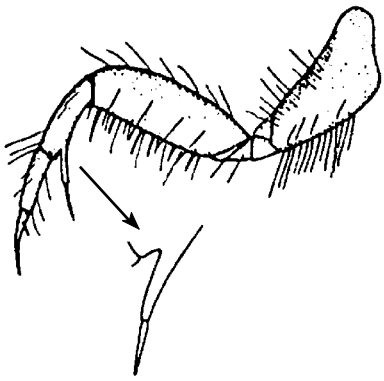
Molanna tryphena is more geographically widespread than *M. blenda* and less restricted in habitat. The geographic distribution of *Molanna ulmerina* in Florida is poorly understood. Harris et al. (1982) reported the species from Rocky Creek on Eglin Air Force Base; our only record of *M. ulmerina* is from Florida Caverns State Park, Jackson County.

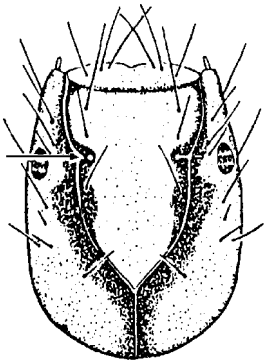
Little is known of the life history of *Molanna* spp. in Florida. Harris et al. (1982) reported flight dates for *M. tryphena* from March to September and November. We collected adults of *M. blenda* and *M. tryphena* throughout the spring and fall months.

ADDITIONAL REFERENCES: Ross (1944); Sherberger and Wallace (1971); Wiggins (1977).

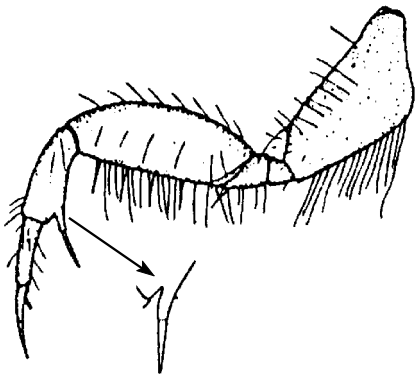
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *MOLANNA* * **

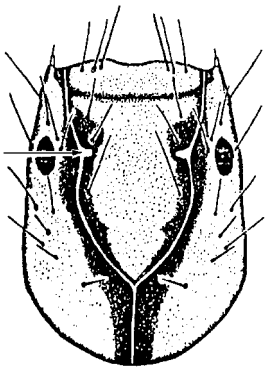
1. Apex of base of spine on fore tibia extending well past tibiotarsal joint; membranous area at constriction of frons capitate
. . . . . *M. blenda*





Apex of base of spine on fore tibia extending to or just past tibiotarsal joint; membranous area at constriction of frons quadrate
. . . . . *M. tryphena*





* key and figures to *Molanna* species adapted from Sherberger and Wallace (1971).

** key does not include *Molanna ulmerina.*

FAMILY ODONTOCERIDAE

The family Odontoceridae is represented in the Nearctic by six genera but only the genus *Psilotreta* extends its geographic range to Florida. The larvae are morphologically recognized by the following: anal proleg without cluster of dorsal setae posteromesad of lateral sclerite (fig. 17D, 17E in family key); foretrochantin small, apex not hook-shaped (fig. 17F in family key); and dorsal sclerites of metathorax entire. The larval case is constructed of coarse sand or small rock fragments tightly glued together. The larvae are generally lotic dwellers but are most common in springbrooks to medium-sized streams with substrates made up of mixtures of sand and gravel.

Genus ***Psilotreta*** Banks

DIAGNOSIS: Larvae distinguished by pointed anterolateral corners of pronotum and genae contiguous along most of median ventral ecdysial line of head. Cylindrical larval cases usually tapered and constructed of sand grains cemented together.

NOTES: Of the six Nearctic species of *Psilotreta*, only *P. frontalis* has been reported in Florida. It will be to no surprise if *P. labida* also occurs in the state because Harris et al. (1991) collected the adults near the Alabama-Florida line, and the geographic ranges of both *P. frontalis* and *P. labida* are largely sympatric (Parker and Wiggins, 1987). The larvae of these species are distinguished by the development of the anterolateral corner of the pronotum, the anteroventral angle of the mesepisternum, and the coloration of the frontoclypeus (see figures in key to species below).

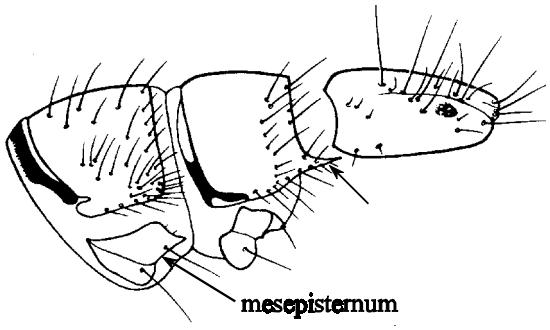
The larvae of *P. frontalis* have been collected primarily in well shaded spring-fed streams where the larvae are known to attack and feed on *Goniobasis* snails (Parker and Wiggins, 1987). In Florida we have collected the larvae only from small spring-fed and sand-bottomed streams such as the ones in the FAMU farm, Gadsden Co. and the Apalachicola ravines, Liberty County.

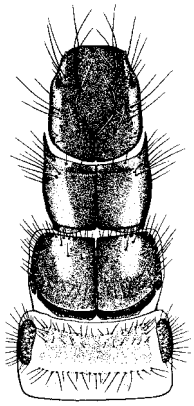
Knowledge of the life history of *P. frontalis* is limited. Unzicker et al. (1982) indicated that in North and South Carolina, adults of the species have been collected in May and June. In Florida we collected the larvae throughout most of the year and the adults throughout spring and fall months.

ADDITIONAL REFERENCES: Parker and Wiggins (1987).

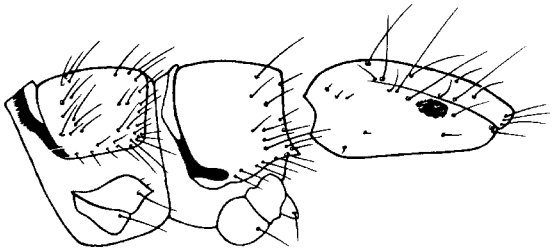
KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *PSILOTRETA* *

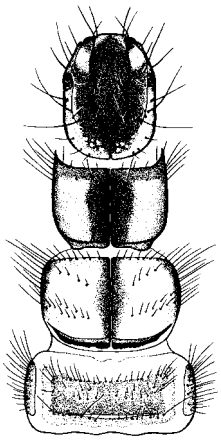
1. Anterolateral corners of pronotum long and acute; anteroventral angles of mesepisternum generally pointed; head in dorsal aspect with broad black stripe of more or less uniform width throughout; frontoclypeus uniformly black
. . . . . *P. labida*





Anterolateral corners of pronotum short; anteroventral angles of mesepisternum short; head in dorsal aspect with broad black stripe constricted anterior to eyes and narrowing gradually posteriorly; frontoclypeus black except for light areas at the anterolateral corners
. . . . . *P. frontalis*





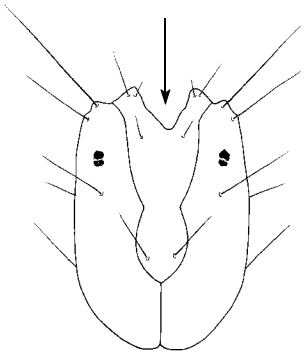
* key and figures to *Psilotreta* species adapted from Parker and Wiggins (1987).

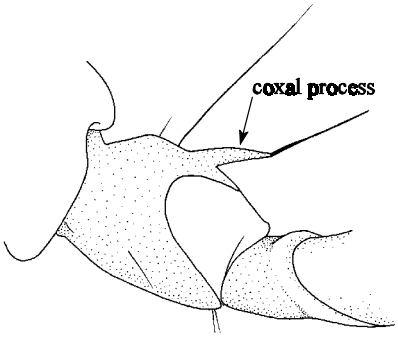
FAMILY PHILOPOTAMIDAE

Two of the three Nearctic genera of Philopotamidae, *Chimarra* and *Wormaldia*, are represented in Florida, the former a widespread genus in the state. Philopotamid larvae have a unique membranous and T-shaped labrum (fig. 9A in family key). The strictly lotic dwelling larvae spin tubular, sac-like, capture nets with fine mesh to filter particulate organic matter. The larvae have the distinction of constructing capture nets with the smallest known mesh openings of any net-spinning caddisflies (Wallace and Malas, 1976).

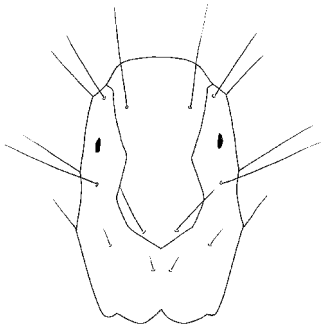
KEY TO GENERA AND SPECIES FOR MATURE LARVAE OF FLORIDA PHILOPOTAMIDAE*

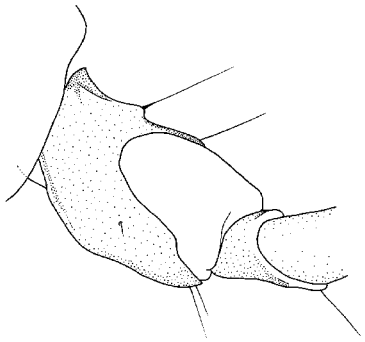
1. Anterior margin of frontoclypeus with prominent notch asymmetrically right of midline; prothoracic coxa with long, slender, subapical seta-bearing process . . . . . *Chimarra*





Anterior margin of frontoclypeus evenly convex, symmetrical; prothoracic coxa without long subapical process . . . . . *Wormaldia, W. moesta*





* key to philopotamid genera adapted from Morse and Holzenthal (1984).

Genus ***Chimarra*** Stephens

DIAGNOSIS: Larvae with anterior margin of frontoclypeus with prominent notch asymmetrically right of midline; and each prothoracic coxa with long slender seta-bearing process (see figures in key to genera).

NOTES: There are six species of *Chimarra* represented in Florida (*C. aterrima, C. falculata, C. florida*, *C. moselyi*, *C. obscura*, and *C. parasocia*). *Chimarra socia* has also been reported to occur in Florida, but because of the taxonomic confusion of *C. socia* with *C. parasocia*, previous Florida records for the former are properly applied to the latter (Lago and Harris, 1987). The occurrence of the species *C. argentella* (Ulmer, 1906) in Florida was reported by Milne (1936), but the accuracy of Milne's identification according to Morse (In Press) has never been confirmed, thus the validity of the Florida record is questionable. Ross (1944) provided a key to the larvae of some species of *Chimarra*, including those of *C. aterrima, C. obscura,* and *C. socia*, but we are unable to identify any of our *Chimarra* specimens using this key. It appears that additional characters other than the anterior margin of the frontoclypeus and mandibular incision are needed to identify the larvae with confidence. Until the larvae and adults are associated, caution must be exercised in identifying the larvae of Florida *Chimarra*. The larvae of *C. falculata, C. florida, C. moselyi*, and *C. parasocia* are undescribed.

As previously alluded, *Chimarra* is geographically widespread in the state, and we found that the larvae are very common in relatively clean, small and clear sand-bottomed streams in North Florida. The larvae were collected with dipnet and Hester-Dendy plates. The larvae appear to be most abundant near shorelines where moss and small pieces of limestone prevail.

The life histories of *Chimarra* spp. of Florida are unknown. We have collected larvae of various sizes throughout the year. Similarly, light-trap collections indicate that adults appear to emerge almost all year except in December-February. Whether *Chimarra* spp. have univoltine or multivoltine life cycles in Florida remains to be investigated. Elsewhere, species such as *C. moselyi* are bivoltine (Unzicker et al., 1982); others (for example, *C. aterrima*) are univoltine (Hilsenhoff et al., 1972).

ADDITIONAL REFERENCES: Ross (1944), Unzicker, Resh, and Morse (1982), Morse and Holzenthal (1984), Morse (In Press).

Genus ***Wormaldia*** MacLachlan

DIAGNOSIS: Larvae morphologically distinguished from *Chimarra* spp. by evenly convex and symmetrical anterior margin of frontoclypeus and absence of subapical process on each prothoracic coxa (see figures in key to genera). The capture net consists of several layers of mesh, each layer having elongate openings of variable sizes (Unzicker et al. (1982).

NOTES: Of the 16 known species of *Wormaldia*, only *W. moesta* is represented in Florida. Ross (1944) briefly described the larva and characterized the species by the absence of a stout coxal spine on each front leg and presence of inconspicuous transverse bars on the frons. The species is uncommon in Florida. We examined one larval specimen that was collected in Bridge Creek, a small tributary of the Chipola River, Jackson Co., and the adults have been collected with light traps beside Rocky Creek on Eglin Air Force Base in Walton County (Harris et al., 1982).

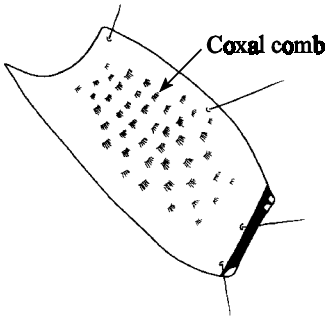
ADDITIONAL REFERENCES: Ross (1944); Unzicker, Resh, and Morse (1982).

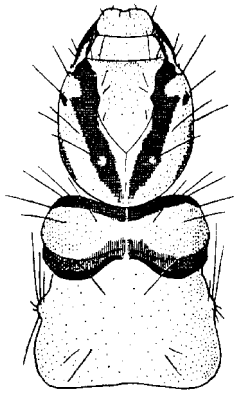
FAMILY PHRYGANEIDAE

The phryganeid caddisflies have nine genera in North America and three of the genera, *Agrypnia*, *Banksiola*, and *Ptilostomis*, are represented in Florida. The larvae are morphologically defined by the presence of a cluster of setae arising from a small rounded sclerite on metanotal sa3 and a well-developed prosternal horn (figs. 7A, 7B in family key). The larval cases are constructed primarily of plant materials in which the pieces are either fastened together to produce a continuous, spirally wound case, or fitted together to form discrete ring-like sections. The larvae inhabit an array of lentic and lotic habitats.

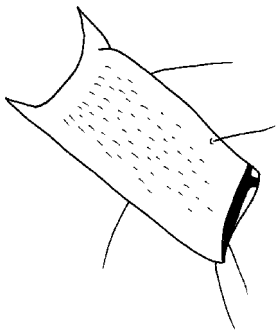
KEY TO GENERA AND SPECIES FOR MATURE LARVAE OF FLORIDA PHRYGANEIDAE*

1. Ventral combs of prothoracic coxae conspicuous, their teeth evident at 50X magnification; head and pronotum as shown in figure below
. . . . . *Agrypnia, A. vestita*

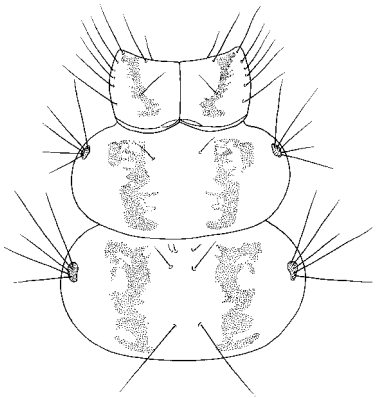




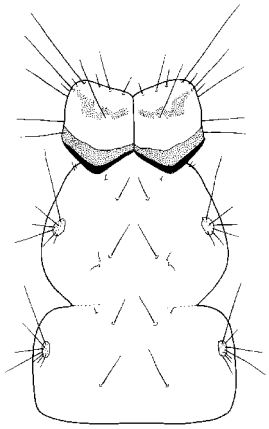
Ventral combs of prothoracic coxae small, each comb appearing as a tiny raised point at 50X magnification; head and pronotum not as above
. 2



2(1) Meso- and metanota with pair of longitudinal, irregular, dark bands; case of spiral construction usually with trailing ends of plant material
. . . . . *Banksiola, B. concatenata*



Meso- and metanota nearly uniform in color; case of spiral construction without trailing ends of plant material
. . . . . *Ptilostomis*



* key to genera adapted from Morse and Holzenthal (1984); figure of *A. vestita*, head and pronotum, from Ross (1944).

Genus ***Agrypnia*** Curtis

DIAGNOSIS: Larvae morphologically characterized by conspicuous ventral combs of prothoracic coxae, coxal combs of mesothoracic legs each with basal axis both transverse and parallel to long axis of coxa, and prothoracic sternellum usually present. The spirally fashioned or ringed larval case is usually constructed of leaf and bark pieces.

NOTES: Only one species of *Agrypnia*, *A. vestita*, is represented in Florida. The larva was described by Ross (1944) and Wiggins (1960), and is morphologically distinguished by the absence of diagonal dark brown bandings on the pronotum, the relatively narrow dorsal banding on the head (see figure in key to genera), and the frontoclypeus usually without markings.

Agrypnia vestita is quite uncommon in Florida. The species has only been collected from a few localities. Gordon (1984) indicated the occurrence of the species in Leon, Liberty, and Okaloosa counties. The larvae have been collected in Roaring Creek, a tributary of the Suwannee River in Hamilton Co. The creek is medium-sized, and has a moderate flow and mostly sandy substrate with plenty of snags and leaf packs in some reaches (R. Frydenborg, pers. comm.).

The life history of *A. vestita* in Florida is unknown. The adults have been collected in April and October through November, and the larvae in January. The species has been reported to emerge in May to October in North and South Carolina (Unzicker et al., 1982).

ADDITIONAL REFERENCES: Ross (1944); Wiggins (1960, 1977); Unzicker, Resh, and Morse (1982).

Genus ***Banksiola*** Martynov

DIAGNOSIS: Larvae morphologically distinguished from *Agrypnia* and *Ptilostomis* by following combination of characters: ventral combs of prothoracic coxae inconspicuous and meso- and metanota with pair of prominent longitudinal dark bands (see figure in key to genera). The spiral larval cases usually have trailing ends of plant materials.

NOTES: *Banksiola* is represented in Florida by the species *B. concatenata.* The species has been reported from Alachua, Baker, and Leon counties (Gordon, 1984) and Walton Co. (Harris et al., 1982). The larva of this species is unknown.

ADDITIONAL REFERENCES: Wiggins (1960, 1977); Unzicker, Resh, and Morse (1982).

Genus ***Ptilostomis*** Koslenati

DIAGNOSIS: Similar to those of genus *Banksiola*, larvae of *Ptilostomis* with inconspicuous ventral combs of prothoracic coxa, but meso- and metanota almost uniform in color (see figure in key to genera). Spiral larval case slightly curved and constructed of plant materials with no trailing ends.

NOTES: One of the four known North American species of *Ptilostomis*, *P. postica*, is represented in Florida. Another species, *P. ocellifera*, has been collected near the Alabama-Florida line (Harris et al., 1991), and could very well also occur in Florida. The adults of *P. postica* were collected by light traps in Jefferson, Leon, and Suwannee counties (Gordon, 1984). The larvae of *Ptilostomis* have been collected in a backwater area of the Blackwater River, Okaloosa Co.; Dry Creek, a tributary of the Chipola River, Jackson Co.; and the Econfina River, Taylor County. Until larval-adult associations are made, the larvae remain unidentified to species.

Like the other Florida phryganeid caddisflies, information on the life histories of *Ptilostomis* spp. is limited. The adults of *P. postica* appear to emerge almost throughout the year, as light-trap collections indicate their flight in March through November. Unzicker et al. (1982) indicated that the adults fly in May through October in North and South Carolina. The larvae of the Florida material examined during this study were collected from January through April.

ADDITIONAL REFERENCES: Wiggins (1960, 1977); Unzicker, Resh, and Morse (1982).

FAMILY POLYCENTROPODIDAE

The diverse polycentropodids are represented in Florida by the genera *Cernotina*, *Cyrnellus*, *Neureclipsis*, *Paranyctiophylax*, and *Polycentropus*. The genus *Phylocentropus*, previously placed within Polycentropodidae, is now classified within the family Dipseudopsidae (Wells and Cartwright, 1993; Weaver and Malicky, 1994).

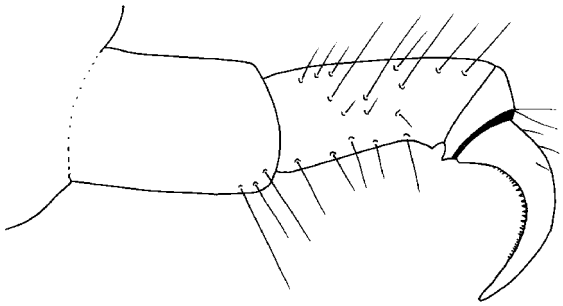
Polycentropodid larvae are most easily recognized by the pointed foretrochantin fused to the episternum without a separating suture and the elongate tarsi (fig. 11B in family key) which distinguish this family from the Dipseudopsidae. Larvae of this family generally occur in lotic habitats, although larvae of *Cernotina* and *Cyrnellus* species are also found in lentic habitats. The family is geographically widespread throughout the state. Larvae construct a variety of fixed retreats and capture nets with the materials, architecture, and placement of the retreats varying among genera.

KEY TO GENERA FOR MATURE LARVAE OF FLORIDA POLYCENTROPODIDAE*

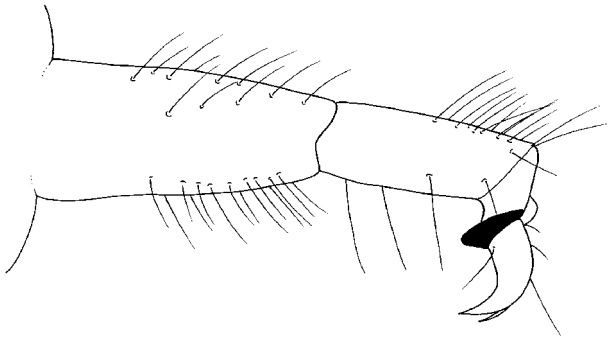
1. Anal claw with 6 or fewer ventral teeth; pronotum with short, stout bristle arising near each ventrolateral margin
. . . . . *Paranyctiophylax*

Anal claw without ventral teeth or with 10 or more tiny ventral spines; pronotum without short, stout bristle near each ventrolateral margin
. 2

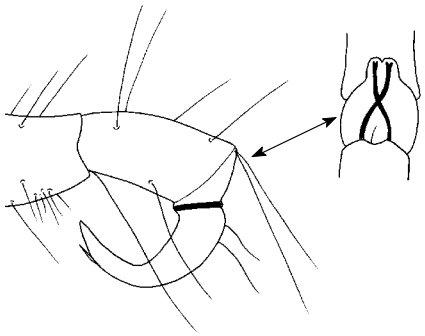
2(1) Basal segment of anal proleg about as long as distal segment and with only 2 or 3 apicoventral setae; anal claw with many tiny ventral spines
. . . . . *Neureclipsis* (p. 105)

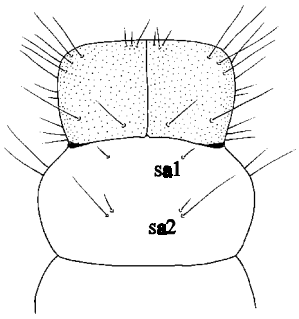


Basal segment of anal proleg longer than distal segment in mature larvae and with many setae scattered over most of its surface; anal claw without tiny ventral spines
. 3



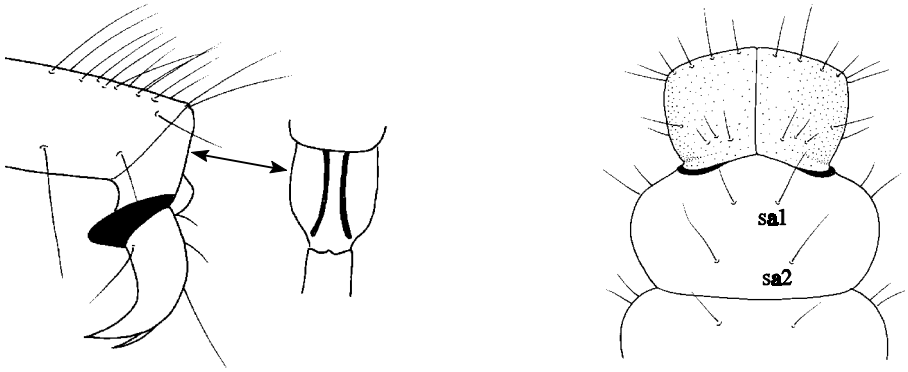
3(2) Dorsal region between anal claw and sclerite of distal segment of anal proleg with 2 mesally contiguous dark bands; meso- and metanotal sa1 setae short, not more than one-third as long as longest sa2 setae
. 4





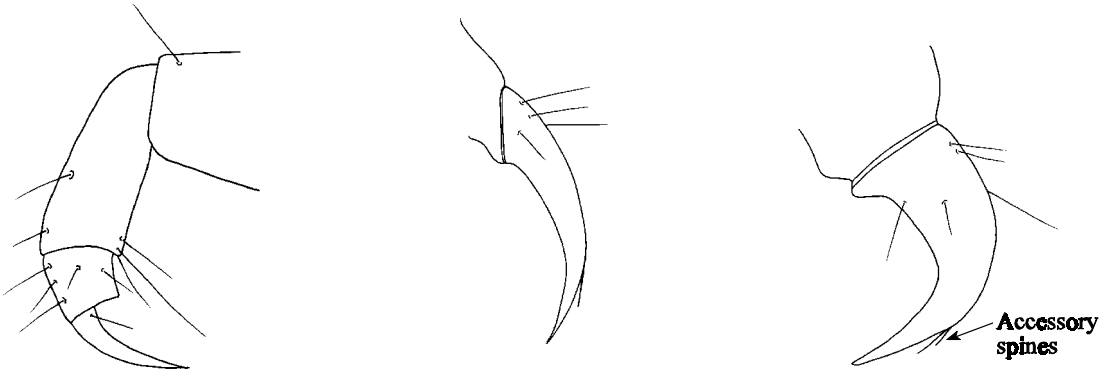
Dorsal region between anal claw and sclerite of distal segment of anal proleg with 2 mesally non-contiguous dark bands; meso- and metanotal sa1 setae about as long as longest sa2 setae

. . . . . *Cyrnellus, C. fraternus*

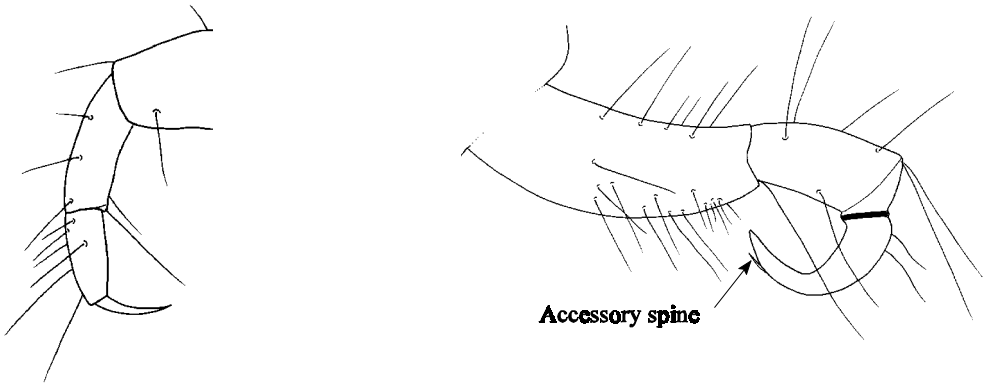


4(3) Prothoracic tarsi each broad and only one-half as long as its prothoracic tibia, *or* anal claw obtusely curved, *or* anal claw with 2 or 3 dorsal accessory spines

. . . . . *Polycentropus*



Prothoracic tarsi each narrow and at least two-thirds as long as its prothoracic tibia, *and* anal claw curved approximately 90°, *and* anal claw with only 1 dorsal accessory spine . . . . . *Cernotina*



* key to polycentropodid genera adapted from Morse and Holzenthal (1984).

Genus ***Cernotina*** Ross

DIAGNOSIS: Larvae of *Cernotina* distinguished from other polycentropodid genera by following characters: mesally contiguous dark bands on dorsal region between anal claw and distal segment of anal proleg; narrow protarsi at least two-thirds as long as protibiae; anal claw curved approximately 90^{o} and with only 1 dorsal accessory spine (see figure in key to genera).

NOTES: Larvae of *Cernotina* will run to *Polycentropus* using Wiggins's (1977) key. It was not until the work of Hudson et al. (1981), with the description of *C. spicata*, that the first positive larval association for this genus was accomplished. The larvae of *Cernotina* and *Polycentropus* species bear close resemblance and careful examination using the characters presented in the key is necessary to distinguish the two. Also it should be noted that the mature larvae of *C. spicata* are quite small, only 4-7 mm long, while mature larvae of *Polycentropus* species are much longer. It is likely that undescribed larvae of other *Cernotina* species are also small in size. Larvae are predaceous and occur in both lotic and lentic habitats where they construct silk tube retreats.

Three species of *Cernotina* have been reported in Florida (see Appendix A) based on adult collections. The geographic distribution of the genus appears to be widespread across the central and northern parts of the state. Morse (In Press) listed *C. truncona* as Rare although it has been recorded from a number of counties in the state. According to Morse (In Press) adult collections are sparse, suggesting small populations. *Cernotina spicata* and *C. calcea* are more common based on collection records of adult specimens.

ADDITIONAL REFERENCES: Wiggins (1977); Hudson, Morse, and Voshell (1981); Morse (In Press).

Genus ***Cyrnellus*** Banks

DIAGNOSIS: Larvae of *Cyrnellus* easily distinguished from other polycentropodid genera by presence of 2 non-contiguous dark bands on dorsal region between anal claw and lateral sclerite of distal segment of anal proleg; and meso- and metanotal sa1 setae as long as sa2 setae (see figures in key to genera).

NOTES: *Cyrnellus* contains a single Nearctic species, *C. fraternus*, first described in the larval stage by Flint (1964); it is widespread across the eastern United States. Larvae most closely resemble *Polycentropus* species but are not difficult to differentiate using the characters presented in the key. Larvae construct a silk retreat, roughly circular in outline, about 20mm in diameter, spun in shallow depressions on rock surfaces. The flat roof of the chamber has circular entrance and exit holes at the ends (Wiggins, 1977).

Cyrnellus fraternus is geographically widespread in Florida, ranging from the panhandle into southern Florida, and occurs in a wide range of lotic as well as lentic habitats.

ADDITIONAL REFERENCES: Flint (1964); Wiggins (1977).

Genus ***Neureclipsis*** MacLachlan

DIAGNOSIS: Larvae of *Neureclipsis* distinguished from those of other polycentropodid genera by basal segment of anal proleg about equal in length to distal segment with only few setae arising from basal segment; also anal claw with row of many tiny spines along ventral margin (see figures in key to genera).

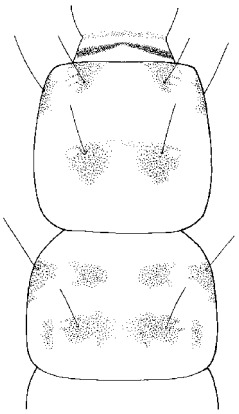
The row of tiny spines along the ventral margin of the anal claw are apparent at 40X magnification viewed from a lateral aspect. It is helpful to use illuminated base lighting as the light will transmit through the spines making them more apparent.

NOTES: Of the five species of *Neureclipsis* occurring in North America only two are found in the southeastern United States, *N. crepuscularis* and *N. melco*; both species have been reported from Florida. Of these two species, only *N. crepuscularis* has been described in the larval stage by Ross (1944). *Neureclipsis crepuscularis* is geographically widespread throughout the state, occurring in streams and rivers from the western panhandle to as far south as the Everglades. *Neureclipsis melco* appears to be more restricted, having been reported based upon adults collected from only the western portions of the panhandle. Based on the examinations of larvae collected throughout the state, it is apparent that the two species have a distinctive pigmentation pattern on the dorsal and lateral portions of the meso- and metathorax, and abdominal segments. Based on the larval description of *N. crepuscularis* by Ross (1944) and the geographic distribution of the species we feel confident larvae can be identified to species using the following key. The tentative assignment of *N. melco* in the key, while not based upon associated larvae, is consistent with the geographic distribution of adults (Gordon, 1984; Harris et al., 1982, 1991). The larvae we base this circumstantial association on were collected from the Escambia River in northern Escambia County.

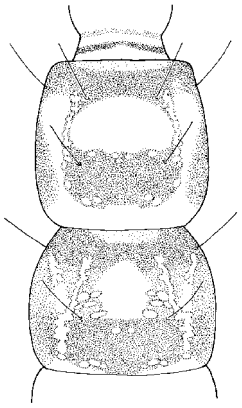
Larvae of *Neureclipsis* species construct a trumpet-shaped tube of silk up to 12 cm long with a flared anterior end which tapers to a slender tube in which the larva is concealed. The retreat is anchored so that the large anterior end faces the current, thus filtering food particles (Wiggins, 1977).

TENTATIVE KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *NEURECLIPSIS*

1. Areas of purplish pigmentation along dorsal and lateral margins of meso- and metathorax and abdominal segments broken into distinctly separate patches with unpigmented areas between patches
. . . . . *N. melco*



Areas of purplish pigmentation along dorsal and lateral margins of meso- and metathorax and abdominal segments not broken into distinctly separate patches but appear as more continuous bands across dorsum
. . . . . *N. crepuscularis*

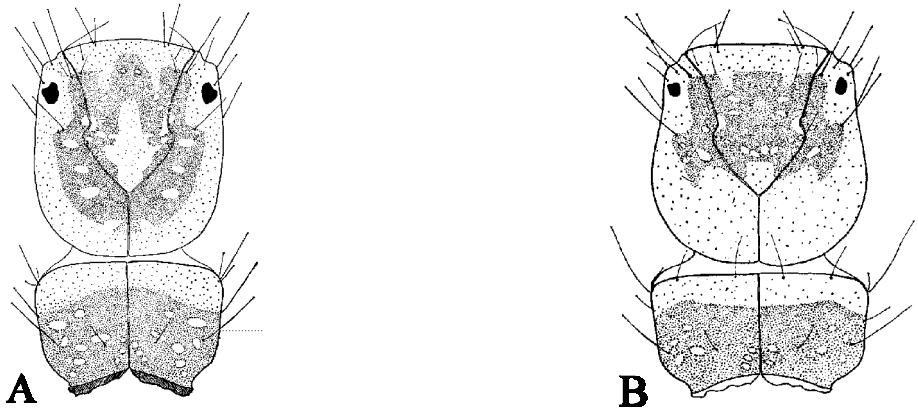


ADDITIONAL REFERENCES: Ross (1944); Wiggins (1977).

Genus ***Paranyctiophylax*** Tsuda

DIAGNOSIS: Larvae of *Paranyctiophylax* easily distinguished from other polycentropodid genera by presence of 6 or fewer conspicuous teeth on ventral margin of anal claw and presence of stout bristle arising near ventrolateral margin of pronotum (see figures in key to genera).

NOTES: Of the nine species of *Paranyctiophylax* known to occur in North America, four have been reported in Florida (see Appendix A) and a 5th species, *P. serratus*, is very likely to occur in the state based upon adults collected near the Florida-Alabama state line (Harris et al., 1991). To date only two of these five species have been described as larvae. Flint (1964) described the larvae of *P. celta* (as *Nyctiophylax vestita*) and *P. moestus* (as *Nyctiophylax* sp. A) (see figs. A and B below). We have examined larvae closely matching Flint's descriptions and illustrations of these species, but we feel that our species determinations remain questionable until additional associations for other *Paranyctiophylax* species have been done. We have examined numerous larvae collected from widespread localities in the state closely resembling Flint's description of *P. moestus* (*Nyctiophylax* sp. A). However, it is very possible that these larvae are *P. affinis*, since this species is considered closely related to *P. moestus* (Armitage and Hamilton, 1990) and is more widespread and common in Florida than *P. moestus* based upon adult collections. We have also examined larvae collected from the Suwannee River closely matching Flint's description of *P. celta* (as *N. vestitus*).



FIGURES: (Flint, 1964) - A. *Paranyctiophylax moestus*; B. *Paranyctiophylax celta*.

Larvae of *Paranyctiophylax* species construct a silk retreat consisting of an open ended chamber over a depression in rock or woody substrate. The floor of the retreat extends beyond the roof at each end as a threshold of silk threads (Wiggins, 1977). A loose network of threads float up from the threshold and the larva darts out of the chamber to capture small prey that have caused the threshold threads to move (Noyes, 1914).

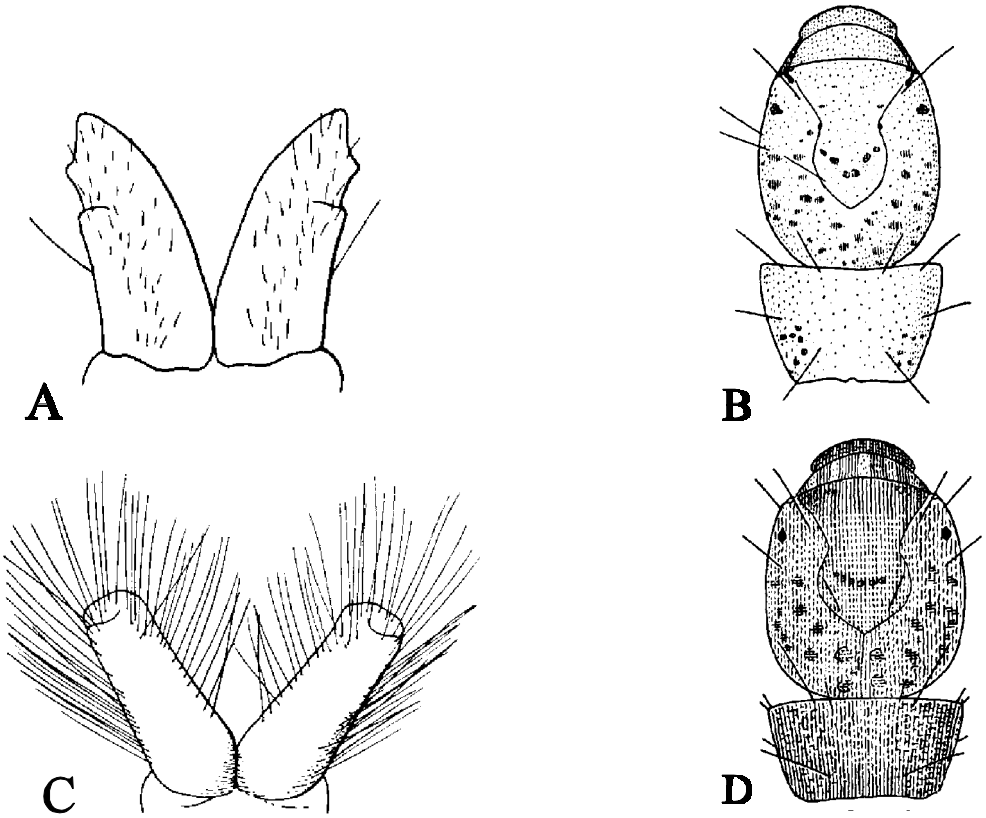
ADDITIONAL REFERENCES: Flint (1964); Wiggins (1977).

Genus ***Polycentropus*** Curtis

DIAGNOSIS: Larvae of *Polycentropus* are most readily distinguished from the other polycentropodid genera (except *Cernotina*) by the presence of two mesally contiguous dark bands on the dorsal region between the anal claw and the distal segment of the anal proleg (see figure in key to genera). *Polycentropus* larvae may be distinquished from those of *Cernotina* by the following characters: prothoracic tarsi broad, one-half as long as prothoracic tibiae, *or* anal claw obtusely curved, *or* anal claw with 2 or 3 dorsal accessory spines (see figures in key to genera).

NOTES: Using the key to the genera of Polycentropodidae becomes rather complicated when trying to distinguish *Polycentropus* species from *Cernotina* species. Larvae of the two genera closely resemble each other and close examination is necessary to discriminate the two. Presently, the generic status of *Polycentropus* is questionable. European trichopterists and others consider North American *Polycentropus* to consist of three genera: *Holocentropus*, *Plectrocnemia* and *Polycentropus s. str*. The larval taxonomy of *Polycentropus* should become clearer as more species are described from the larval stage. Presently, five species of *Polycentropus* are known to occur in Florida with another two species we believe likely to occur in the state based upon their geographic distributions (See Appendix A). Of these seven species only two have been described as larvae [i. e., *P. cinereus* and *P. interruptus* by Ross (1944)]. *Polycentropus cinereus* was described as having the basal segment of the anal prolegs with fairly short setae distributed uniformly over the ventral surface and the spots on the posterior region of the frontoclypeus forming an angle (see figs. A and B below). *Polycentropus interruptus* was described as having the basal segment of the anal prolegs with longer setae grouped in two lateral linear areas and the head yellowish with distinct dark spots

and most of the dorsum clouded with reddish brown; also, the anterior region of the frontoclypeus has a pale area around the base of the major pair of setae (not shown in figure) (See figs. C and D below).



FIGURES: (Ross, 1944) - A. *Polycentropus cinereus*, basal segment anal prolegs, ventral aspect; B. *Polycentropus cinereus*, head and pronotum; C. *Polycentropus interruptus*, basal segment anal prolegs, ventral aspect; D. *Polycentropus interruptus*, head and pronotum.

Gordon (1984) showed *P. cinereus* as being the most widespread species of *Polycentropus*, and our examinations of larvae matching the description of *P. cinereus* by Ross (1944) lead us to conclude that indeed it is probably the most widespread and common *Polycentropus* species in the state. *Polycentropus floridensis*, listed as a Threatened species by Morse (In Press), is known only from its type localities in Baldwin Co., Alabama and the headwaters of Rocky Creek, Walton Co., Florida (Lago and Harris, 1983). Gordon (1984) listed both *P. crassicornis* and *P. interruptus* as being recorded from single counties, Columbia and Walton counties, respectively. *Polycentropus blicklei* is herein reported for the first time from Florida. We collected an adult male specimen of *P. blicklei* in the month of March along Little Sweetwater Creek, a ravine stream in Liberty County.

Larvae of *Polycentropus* species construct silk retreats of two different types: either a silk tube flared at both ends with a network of silk trip lines for signalling the presence of prey or a bag-like structure expanded by the current (Wiggins, 1977).

ADDITIONAL REFERENCE: Ross (1944).

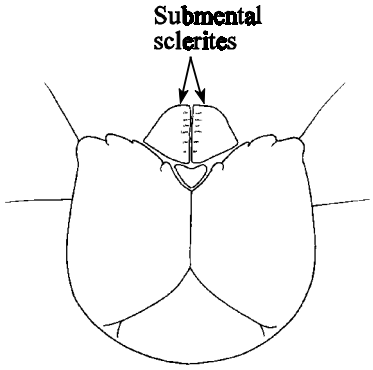
FAMILY PSYCHOMYIIDAE

This family is least common among the net-spinning caddisflies, within Florida as well as North America. The psychomyiids are represented in Florida by two genera: *Lype* (*Lype diversa*) and *Psychomyia* (*Psychomyia flavida*).

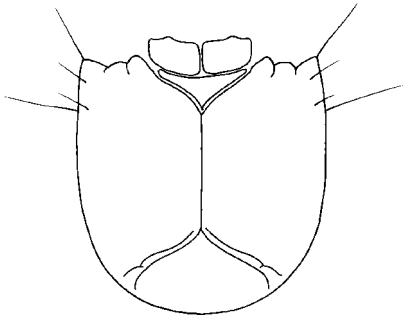
Psychomyiid larvae are readily distinguished from the other caddis families by the presence of a broad hatchet-shaped foretrochantin separated from the proepisternum by a basal suture (fig. 10A in family key). The labium, with the opening of the silk gland (spinnerette), extends beyond the anterior margin of the head, facilitating the application of silk within the retreats. Larvae occur in lotic habitats where they construct and live in fixed silken tubes or tunnels attached to rock and wood substrates.

KEY TO GENERA AND SPECIES FOR MATURE LARVAE OF FLORIDA PSYCHOMYIIDAE*

1. Anal claw with 3 or 4 conspicuous teeth along ventral, concave margin; paired submental sclerites on ventral surface of labium longer than broad
. . . . . *Psychomyia, P. flavida*



Anal claw without teeth on ventral concave margin; paired submental sclerites on ventral surface of labium broader than long
. . . . . *Lype, L. diversa*

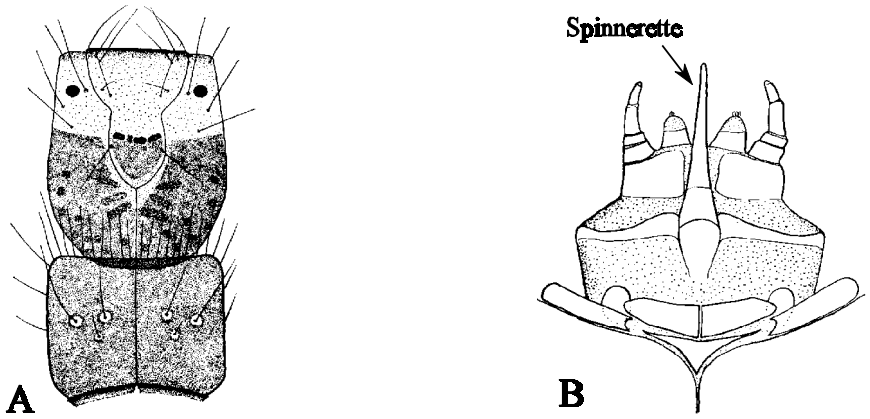


* key to psychomyiid genera and species adapted from Morse and Holzenthal (1984).

Genus ***Lype*** MacLachlan

DIAGNOSIS: Larvae of *Lype* easily distinguished from *Psychomyia* by absence of teeth on ventral margin of anal claw; also, paired submental sclerites of labium broader than long (see figure in generic key).

NOTES: The genus *Lype* contains a single North American species, *L. diversa*. The immature stages of this species were described by Flint (1959). The mature larva is 7-8 mm in length. The head coloration pattern is distinctive, with the anterior third yellowish and posterior two-thirds brown in color (Fig. A below). Also noteworthy is the long central spinnerette on the maxillo-labium (Fig. B below) which is characteristic of Dipseudopsidae and this family.



FIGURES: (Flint, 1959) - A. *Lype diversa*, head and pronotum; B. *Lype diversa*, maxillo-labium, ventral.

Lype diversa is geographically widespread across the northern half of the state. The larvae are most commonly found in small cool streams where they construct well-camouflaged retreats in the grooves of submerged wood. Specimens can be collected either by careful examination of wood substrate or by using artificial substrates such as Hester-Dendy multiplate samplers. Little is known of the life history for this species in Florida. In more northern areas of the United States the species is univoltine.

ADDITIONAL REFERENCES: Flint (1959); Wiggins (1977); Unzicker, Resh, and Morse (1982).

Genus ***Psychomyia*** Latreille

DIAGNOSIS: Larvae of genus *Psychomyia* distinguished from those of *Lype* by presence of 3 or 4 conspicuous teeth on concave margin of anal claw; also, submental sclerites on ventral surface of labium longer than broad (see figures in generic key).

NOTES: The genus *Psychomyia* contains three North American species of which only *P. flavida*

occurs in Florida. The larva of this species was first described by Ross (1944) and then later by Flint (1964). Gordon (1984) reported *P. flavida* from Jackson Co. (no specific locality provided); we examined larval specimens collected from the Chipola River, Calhoun Co. This species is not known to occur anywhere else in the state and is quite possibly restricted to the Chipola River basin. Larvae construct silk tubes covered with sand on rocks (Wiggins, 1977) and feed on organic particles which they collect. *Psychomyia flavida* is believed to reproduce parthenogenetically, and light trap collections usually consist of large numbers of females with very few males (Swegman, 1978; Unzicker et al., 1982).

ADDITIONAL REFERENCES: Ross (1944); Flint (1964); Wiggins (1977); Unzicker, Resh, and Morse (1982).

FAMILY RHYACOPHILIDAE

The family Rhyacophilidae is represented in North America by two genera, but only the genus *Rhyacophila* occurs in the eastern United States, extending its geographic range from the Northeast to Florida. More than 100 rhyacophilid species occur in North America, with nearly all of the species belonging to the genus *Rhyacophila* (Dixon and Wrona, 1992).

Rhyacophilid larvae are morphologically recognized by the presence of a dorsal sclerite on abdominal segment IX , anal proleg which is almost entirely free from abdominal segment IX, and the lack of dorsal accessory hooks on the anal claw (fig. 8C in family key).

Unlike other caddisflies, which construct larval cases or retreats, rhyacophilid larvae are basically free living, and attachment to the substrate is facilitated by the secretion of a silk thread anchor line. The larvae are generally found in fast-flowing streams, and many species are predaceous while a few are herbivorous, feeding on living or dead plant tissues.

Genus ***Rhyacophila*** Pictet

DIAGNOSIS: Eastern Nearctic larvae usually without gill tufts, if present very sparse and only on few abdominal segments; and final instar larvae short, less than 30 mm long.

NOTES: Of the approximately 100 species of *Rhyacophila* known in North America, only the species *R. carolina* has been reported in Florida. Another species, *R. ledra*, may eventually appear in the state because it has recently been reported to occur near the Alabama-Florida line (Harris et al., 1991). Both species belong to the *R. carolina* species group, having larvae with edentate anal claws. The larva of *R. carolina*, however, can easily be distinguished from that of *R. ledra* by its more or less unicolorous golden yellow head, compared to the distinctive pattern of infuscation and muscle scars in the latter (see figure in key below).

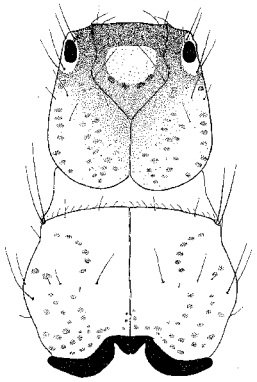
Knowledge of the life cycle of *R. carolina* is limited. Some species of *Rhyacophila* have been shown to have univoltine life cycles (Manuel and Folsom, 1982; Singh et al., 1984; Martin, 1985), and one species, *R. vofixa* from an Alaskan stream, appears to require several years to complete a life cycle (Irons, 1987). When ready to pupate, the larvae characteristically construct a silken cocoon inside a dome-like shelter of small stones, but no case or retreat is constructed before then. *Rhyacophila carolina* has been observed to fly in late April to October in North and South Carolina (Unzicker et al., 1982). In Florida we collected adults from March to December.

Rhyacophila carolina appears to be geographically confined to the panhandle section of the state. We have examined larval collections from McDavid Creek in the Escambia River basin, Santa Rosa Co., and collected the larvae and adults from several spring-fed ravine streams in Gadsden and Liberty counties.

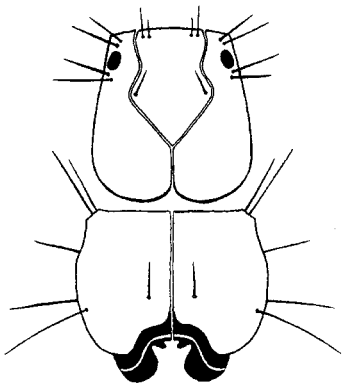
ADDITIONAL REFERENCES: Flint (1962); Weaver and Sykora (1979); Unzicker, Resh, and Morse (1982).

KEY TO SPECIES FOR MATURE LARVAE OF FLORIDA *RHYACOPHILA**

1. Head with distinct pattern of infuscations and muscle scars
. . . . . *R. ledra*



Head not as above, near unicolorously golden yellow
. . . . . *R. carolina*



* key to *Rhyacophila* species adapted from Flint (1962); figure of *R. ledra* from Flint (1962); figure of *R. carolina* from Weaver and Sykora (1979).

FAMILY SERICOSTOMATIDAE

The family Sericostomatidae is represented in North America by the genera *Agarodes*, *Fattigia*, and *Gumaga*. Only the genus *Agarodes*, the most widespread of the three genera, extends its geographic range to Florida.

The sericostomatid larvae are morphologically recognized by a cluster of setae (approximately 30 or more) posteromesad of the lateral sclerite of the anal proleg (figs. 17A, 17B in family key), and the large, and apically hooked foretrochantin (fig. 17C in family key). The larva constructs a curved and slightly tapered case, usually composed of medium to coarse sand with plant pieces mixed in.

Genus ***Agarodes*** Banks

DIAGNOSIS: Larvae of *Agarodes* spp. briefly defined by following combination of characters: pronotum with sharp-pointed anterolateral corners; dorsum of abdominal segment IX with about 4 major setae and about 10 shorter ones along posterior edge; head rounded dorsally with inconspicuous lateral carina.

NOTES: The genus is widespread throughout eastern North America from Canada to Florida and west to Wisconsin and Mississsippi (McEwan, 1980). The three species of *Agarodes* presently known in Florida include *A. crassicornis*, *A. libalis*, and *A. ziczac*. Additionally, we have recently collected the adults of a new species (*Agarodes* n. sp.) in a small spring-fed, sand-bottomed stream in Gadsden County. One of us (SCH) is in the process of describing the new taxon. The Florida *Agarodes* species are all geographically restricted to the northern region of the state. *Agarodes ziczac*, listed as Threatened by Morse (1982, In Press), appears to be endemic to the extreme northwestern panhandle. Of the *Agarodes* species known in Florida, only *A. libalis* has the larvae and adults associated. The key modifed from that of McEwan (1980), presented below, will separate larvae of the subgenus *Psiloneura* from those of the subgenus *Agarodes*.

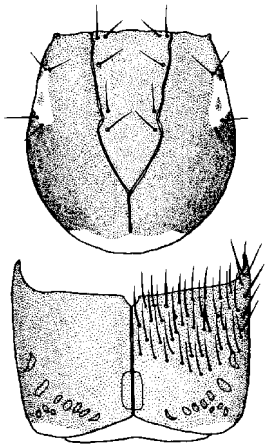
Except for the collection records, information on the life history of *Agarodes* in Florida is non-existent. We have collected the larvae in January, March, and May. The adults of *A. crassicornis* and *A. libalis* came to light in April and May, compared to March to September for *A. ziczac*. *Agarodes* n. sp. was also collected in May. Unzicker et al. (1982) indicated the flight of *A. crassicornis* and *A. libalis* from mid-June and mid-May to mid-August, respectively, in North and South Carolina.

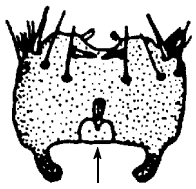
Larvae of *Agarodes* are mostly restricted to small streams with a medium current and a sandy bottom. We have collected larvae near the headwaters of Burnt Mill Creek, Jefferson Co.; FAMU farm stream, Gadsden Co.; and Little Sweetwater Creek, Liberty Co. We also examined larvae that were collected from the headwaters of Narrows Creek, Walton Co. and Goldhead Branch, Clay County.

ADDITIONAL REFERENCES: Ross and Wallace (1974); Ross and Scott (1974); McEwan (1980); Unzicker, Resh, and Morse (1982); Morse (In Press).

KEY TO SUBGENERA FOR MATURE LARVAE OF FLORIDA *AGARODES** **

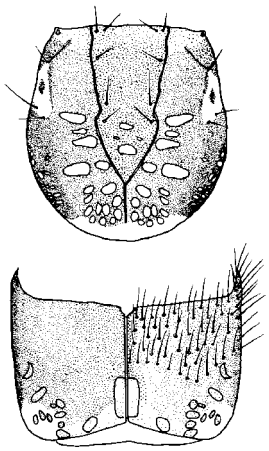
1. Head brown without gold or white contrasting muscle scars; labrum brown with paired dorso-basal white muscle scars; pronotum with brown muscle scars . . . . . subgenus *Psiloneura, A. libalis*

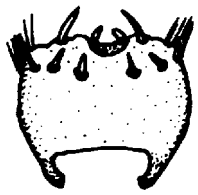




labrum

Head brown with gold or white contrasting muscle scars; labrum whitish or gold without basal muscle scars; pronotum with white and gold muscle scars . . . . . subgenus *Agarodes, A. crassicornis, A. ziczac*





* key and figures to *Agarodes* subgenera adapted from McEwan (1980).

** key does not include *Agarodes* n. sp.

FAMILY UENOIDAE

The family Uenoidae consists of two subfamilies, Uenoinae and Thremmatinae (Vineyard and Wiggins, 1988). Only the subfamily Thremmatinae is represented in Florida and of the three thremmatine genera presently recognized, only the genus *Neophylax* occurs in Florida.

The uenoid larvae are morphologically recognized by the rounded anterior margin of the pronotum (fig. 19A in family key); and basal seta of tarsal claw elongate, extending to near the tip of claw (fig. 19B in family key). The smooth and slender larval cases of most genera (except *Neophylax*) are constructed of fine mineral particles, sometimes of silk alone. The larvae are found in a wide array of lotic habitats.

Genus ***Neophylax*** MacLachlan

DIAGNOSIS: Larvae characterized by following combination of characters: pronotum distinctly wider posterad of transverse mid-point and with rounded anterior margin; mesonotal sclerite with deep anteromedian notch; abdominal segment I with well-developed middorsal hump; and most species with pair of ventral abdominal gills.

NOTES: *Neophylax* is represented in Florida by the species *N. concinnus*. The larva of the species was first described by Ross (1944) (as *N. autumnus*). Flint (1960) subsequently provided a key to the larvae of some of the species of *Neophylax* and characterized the larvae of *N. concinnus* by the short or barely noticeable setae along the anterior margin of the pronotum, the lack of a frontal tubercle on the head, and the presence of spicules on the entire dorsal surface of the head. *Neophylax* larvae construct cases which are short and thick, composed of coarse rock fragments with several larger ballast stones along each side (Wiggins, 1977).

Neophylax concinnus is uncommon in Florida and has been reported as occurring in Florida only by Harris et al. (1991). So far, we have collected only two immature larvae of *Neophylax* from the Aucilla River in December, after three years of extensive sampling of the various streams in North Florida, using both the Hester-Dendy and dipnet methods. The larvae were collected with dipnets near the river shoreline; the substrates consisted of mixtures of sand and silt with plenty of coarse particulate organic matter. The larvae are too small to identify to species.

Neophylax concinnus has been reported to have a univoltine life cycle (Clifford, 1966) The life history of the species in subtropical conditions like Florida is yet to be investigated. Unique to *Neophylax* is the life cycle of every species, including a long prepupal (spring-summer) diapause which varies in length from two to six months (Vineyard and Wiggins, 1988).

ADDITIONAL REFERENCES: Ross (1944); Flint (1960); Vineyard and Wiggins (1988).

LITERATURE CITED

Anderson, N. H. 1976. The distribution and biology of the Oregon Trichoptera. Agric. Exp. Tech. Bull. No. 134, Oregon State Univ., Corvallis. 152 pp.

Armitage, B. J. and S. W. Hamilton. 1990. Diagnostic atlas of the North American caddisfly adults. II. Ecnomidae, Polycentropodidae, and Xiphocentronidae. The Caddis Press. 152 pp.

Banks, N. 1907. Descriptions of new Trichoptera. Proc. Entomol. Soc. Washington. 8:117-133.

Barton, D. R., and H. B. N. Hynes. 1978. Wave-zone macrobenthos of the exposed Canadian shores of the St. Lawrence Great Lakes. J. Great Lakes Res. 4:27-45.

Benke, A. C., and J. B. Wallace. 1980. Trophic basis of production among net-spinning caddisflies in southern Appalachian stream. Ecology. 61:108-118.

Blickle, R. L. 1961. New species of Hydroptilidae (Trichoptera). Bull. Brooklyn Entomol. Soc. 56:131-134.

_____. 1962. Hydroptilidae (Trichoptera) of Florida. Florida Entomologist. 45:153-155.

_____. 1979. Hydroptilidae (Trichoptera) of North America North of Mexico. New Hampshire Agric. Exp. Sta. Univ. New Hampshire. Bull. 509. 97 pp.

Chen, Y. 1993. Revision of the *Oecetis* (Trichoptera: Leptoceridae) of the world. Ph.D. Dissertation, Clemson University. Clemson, South Carolina. 704 pp.

Chapin, J. W. 1978. Systematics of Nearctic *Micrasema* (Trichoptera: Brachycentridae). Ph.D. Dissertation, Clemson University. Clemson, South Carolina. 136 pp.

Clifford, H. P. 1966. The ecology of invertebrates in an intermittent stream. Invest. Indiana Lakes Streams. 7:57-98.

Daigle, J. J. and J. D. Haddock. 1981. The larval description and ecological notes of the caddisfly, *Nectopsyche tavara* (Ross) from the Central Florida refugium (Trichoptera: Leptoceridae). Pan-Pacific Entomologist. 57:327-331.

Denning, D. G. 1947. Hydroptilidae (Trichoptera) from southern United States. Can. Entomologist. 79:12-20.

_____. 1948a. New species of Trichoptera. Annals Entomol. Soc. Amer. 41:397-401.

_____. 1948b. Descriptions of eight new species of Trichoptera. Bull. Brooklyn

Entomol. Soc. 119-129.

_____. 1951. Records and descriptions of Nearctic caddisflies. Part III. J. Kansas Entomol. Soc. 24:157-162.

_____. 1971. A new genus and new species of Trichoptera. Pan-Pacific Entomologist. 47:202-210.

Dixon, R. W. J. and F. J. Wrona. 1992. Life history and production of the predatory caddisfly *Rhyacophila vao* Milne in a spring-fed stream. Freshwater Biology. 27:1-11.

Flint, O. S., Jr. 1959. The immature stages of *Lype diversa* (Banks) (Trichoptera, Psychomyiidae). Bull. Brooklyn Entomol. Soc. 54:44-47.

_____. 1960. Taxonomy and biology of Nearctic limnephilid larvae (Trichoptera), with special reference to species in eastern United States: Entomologia Americana. 40:1-117.

_____. 1962. Larvae of the caddis fly genus *Rhyacophila* in eastern North America (Trichoptera: Rhyacophilidae). Proc. U. S. Nat. Mus. 113:465-493.

_____. 1964. Notes on some Nearctic Psychomyiidae with special reference to their larvae (Trichoptera). Proc. U. S. Nat. Mus. 115:467-481.

_____. 1984. The genus *Brachycentrus* in North America, with a proposed phylogeny of the genera of Brachycentridae (Trichoptera): Smithsonian Contr. to Zoology. 398:1-58.

Flint, O. S., Jr., J. R. Voshell, and C. R. Parker, 1979. The *Hydropsyche scalaris* group in Virginia, with the description of two new species (Trichoptera:Hydropsychidae). Washington Biol. Soc. Proceedings. 92:837-862.

Floyd, M. A. 1994. Larvae of the caddisfly genus *Oecetis* (Trichoptera: Leptoceridae) in North America. Ph.D. Dissertation, Clemson University. Clemson, South Carolina. 152 pp.

Fremling, C. R. 1960. Biology and possible control of nuisance caddisflies of the Upper Mississippi River. Agric. Home Econ. Exp. Sta., Iowa State Univ. Res. Bull. No. 483:856-879.

Fuller, R. L. and R. J. Mackay. 1981. Effects of food quality on growth of three *Hydropsyche* species (Trichoptera:Hydropsychidae). Can. J. Zool. 59:1133-1140.

Glover, B. J. 1993. The taxonomy and biology of the larvae of the North American caddisflies in the genera *Triaenodes* and *Ylodes* (Trichoptera: Leptoceridae). Ph.D. Dissertation, University of Louisville. Louisville, Kentucky. 252 pp.

Gordon, E. A. 1974. A synopsis and phylogenetic outline of the Nearctic members of

Cheumatopsyche. Proc. Acad. Nat. Sci. Phil. 126:117-160.

_____. 1984. The Trichoptera of Florida: A preliminary survey. Pp. 161-166 *in* J. C. Morse, ed. Proceedings of the Fourth International Symposium on Trichoptera, Vol. 30. Dr. W. Junk Publishers, The Hague. 486 pp.

Gordon, E. A. and J. B. Wallace. 1975. Distribution of the family Hydropsychidae (Trichoptera) in the Savannah River Basin of North Carolina, South Carolina and Georgia. Hydrobiologia. 46:405-302.

Haddock, J. D. 1977. The biosystematics of the caddis fly *Nectopsyche* in North America with emphasis on the aquatic stages. Amer. Midl. Nat. 98:382-421.

Hamilton, S. W. 1985. The larva and pupa of *Beraea gorteba* Ross (Trichoptera: Beraeidae). Proc. Entomol. Soc. Washington. 87:783-789.

Harris, S. C. 1991. New caddisflies (Trichoptera) from Alabama and Florida. Bull. Alabama Mus. Nat. Hist. 11:11-16.

Harris, S. C. and B. J. Armitage. 1987. New Hydroptilidae (Trichoptera) from Florida. Ent. News. 98:106-110.

Harris, S. C., P. K. Lago, and J. F. Scheiring. 1982. Annotated list of Trichoptera of several streams of Eglin Air Force Base, Florida. Entomol. News. 93:79-84.

Harris, S. C., P. E. O'Neil, and P. K. Lago. 1991. Caddisflies of Alabama. Geological Survey of Alabama. Bull. No. 142. 442 pp.

Harris, T. L. and T. M. Lawrence. 1978. Environmental requirements and pollution tolerance of Trichoptera. EPA Environ. Monitoring Series. EPA-600/4-78-063. 307 pp.

Hilsenhoff, W. L. 1975. Aquatic insects of Wisconsin. Generic keys and notes on biology, ecology and distribution. Wisconsin Dept. Nat. Res. Tech. Bull. No. 89. 53 pp.

Hilsenhoff, W. L., J. L. Longridge, R. P. Narf, K. L. Tennessen, and C. P. Walton. 1972. Aquatic insects of the Pine Popple River, Wisconsin. Wisconsin Dept. Nat. Res. Tech. Bull. No. 54. 42 pp.

Holzenthal, R. W. 1982. The caddisfly genus *Setodes* in North America (Trichoptera: Leptoceridae). J. Kansas Entomol. Soc. 55:253-271.

Holzenthal, R. W. and R. W. Kelley. 1983. New micro-caddisflies from the southeastern United States (Trichoptera: Hydroptilidae). Florida Entomologist. 66:464-472.

Hudson, P. L., J. C. Morse, and J. R. Voshell, Jr. 1981. Larva and pupa of *Cernotina spicata.*

Ann. Entomol. Soc. Amer. 74:516-519.

Irons, J. G. III. 1987. Life history patterns and trophic ecology of Trichoptera in two Alaskan (U.S.A.) subarctic streams. Can. J. Zool. 66:1258-1265.

Irons, J. G., III, M. V. Oswood, and J. P. Bryant. 1988. Consumption of leaf detritus by a stream shredder: Influence of tree species and nutrient status. Hydrobiologia. 160:53-61.

Johnson, R. K., T. Wiederholm, and D. M. Rosenberg. 1993. Freshwater biomonitoring using individual organism, populations, and species assemblages of benthic macroinvertebrates. Pp. 40-158 *in* D. M. Rosenberg and V. H. Resh, eds. Freshwater biomonitoring and benthic macroinvertebrates. Chapman and Hall, NY. 488 pp.

Kelley, R. W. 1981. New species of *Oxyethira* (Trichoptera: Hydroptilidae) from the southeastern United States. J. Georgia Entomol. Soc. 16:368-375.

_____. 1982. The micro-caddisfly genus *Oxyethira* (Trichoptera: Hydroptilidae): Morphology, biogeography, evolution and classification. Ph.D. Dissertation, Clemson University. Clemson, South Carolina. 436 pp.

Kingsolver, J. M., and H. H. Ross. 1961. New species of Nearctic *Orthotrichia* (Hydroptilidae, Trichoptera). Illinois Acad. Sci. Trans. 54:28-33.

Lago, P. K. and S. C. Harris. 1983. New species of Trichoptera from Florida and Alabama. Ann. Entomol. Soc. Amer. 76:663-667.

_____. 1987. The *Chimarra* (Trichoptera: Philopotamidae) of eastern North America with descriptions of three new species. J. New York Entomol. Soc. 95:225-251.

Lenat, D. R. 1988. Water quality assessment of streams using qualitative collection method for benthic macroinvertebrates. J. N. Am. Benthol. Soc. 7:222-233.

Manuel, K. L. and T. C. Folsom. 1982. Instar sizes, life cycles, and food habits of five *Rhacophila* (Trichoptera: Rhyacophilidae) species from the Appalachian Mountains of South Carolina, U.S.A. Hydrobiologia. 97:281-285.

Martin, I. D. 1985. Microhabitat selection and life cycle patterns of two *Rhyacophila* species (Trichoptera: Rhyacophilidae) in southern Ontario streams. Freshwater Biology. 15:1-14.

Mattson, R. A. 1992. Characteristics of benthic macroinvertebrate communities of the Suwannee River drainage. Unpublished report. Suwannee River Water Management District, Live Oak, FL. 188 pp.

McEwan, E. 1980. Biology and life history of the genus *Agarodes* (Trichoptera:

Sericostomatidae) in the southeastern U.S. M.S. Thesis, Clemson University. Clemson, South Carolina. 67 pp.

Menking, D. E. 1978. Biology and life history of the caddisfly genus *Phylocentropus* (Polycentropodidae) with special references to influences of heated water. M.S. Thesis, Clemson University. Clemson, South Carolina. 28 pp.

Merrill, D. and G. B. Wiggins. 1971. The larva and pupa of the caddisfly genus *Setodes* in North America. Trichoptera; Leptoceridae). Life Sci. Occ. Papers, Royal Ontario Mus., No. 19. 12 pp.

Merritt, R. W., K. W. Cummins, and T. M. Burton. 1984. The role of aquatic insects in the processing and cycling of nutrients. Pp. 134-163 *in* V. H. Resh and D. M. Rosenberg, eds., The ecology of aquatic insects. Praeger, New York. 625 pp.

Merritt, R. W. and J. B. Wallace. 1981. Filter-feeding insects. Sci. Am. 244:132-144.

Milne, L. J. 1936. Studies in North American Trichoptera. Privately printed, Cambridge, Massachusetts. 3:56-158.

Morse, J. C. 1972. The genus *Nyctiophylax* in North America. J. Kansas Entomol. Soc. 45:172-181.

_____. 1975. A phylogeny and revision of the caddisfly genus *Ceraclea* (Trichoptera: Leptoceridae). Amer. Entomol. Institute Contr. 11:1-97.

_____. 1982. Order Trichoptera. Pp. 51-71 *in* R. Franz, ed. Invertebrates: Rare and endangered biota of Florida. Univ. Presses Florida. Vol. 16, 131 pp.

_____. 1993. A checklist of the Trichoptera of North America, including Greenland and Mexico. Trans. Amer. Entomol. Soc. 119:47-93.

_____. In Press. Order Trichoptera. Pp... *in* R. Franz, ed. Invertebrates. Rare and endangered biota of Florida. Univ. Presses of Florida.

Morse, J. C. and C. B. Barr. 1990. Unusual caddisfly (Trichoptera) fauna of Schoolhouse Springs, Louisiana, with description of a new species of *Diplectrona* (Hydropsychidae) Proc. Entomol. Soc. Washington. 92:58-65.

Morse, J. C. and R. W. Holzenthal. 1984. Trichoptera genera. Pp. 312-347 *in* R. W. Merritt, and K. W. Cummins, eds., An introduction to the aquatic insects of North America. Dubuque, Iowa. Kendall/Hunt Publishing Co. 720 pp.

Nations, V. L. 1994. A phylogenetic analysis of the North American species of *Setodes* (Trichoptera: Leptoceridae) with descriptions of the larvae and key to their identification.

M.S. Thesis, University of Alabama. Tuscaloosa, Alabama. 72 pp.

Nielsen, A. 1948. Postembryonic development and biology of the Hydroptilidae. Kgl. Danske Vidensk. Selsk. Biol. Skr. 5:1-200.

Nimmo, A. P. 1987. The adult Arctopsychidae and Hydropsychidae (Trichoptera) of Canada and adjacent United States. Quaestiones Entomologicae. 23:1-189.

Noyes, A. A. 1914. The biology of the net-spinning Trichoptera of Cascadilla Creek. Ann. Entomol. Soc. Amer. 7:251-272.

Osborne, L. L. and E. E. Herricks. 1987. Microhabitat characteristics of *Hydropsyche* (Trichoptera: Hydropsychidae) and the importance of body size. J. N. Am. Benthol. 6:115-124.

Parker, C. R. and G. B. Wiggins. 1987. Revision of the caddisfly genus *Psilotreta* (Trichoptera: Odontoceridae). Roy. Ontario Mus. Life Sciences Contr. 144. 55 pp.

Patterson, J. W., and R. L. Vannote. 1979. Life history and population dynamics of *Heteroplectron americanum*. Environ. Ent. 8:665-669.

Plafkin, J. L., M. T. Barbour, K. D. Porter, S. K. Gross, and R. M. Hughes. 1989. Rapid bioassessment protocols for use in streams and rivers: Benthic macroinvertebrates and fish. U.S. EPA, Assessment and Watershed Protection Division, Washington, D.C., EPA/4404-89-001.

Resh, V. H. 1976. The biology and immature stages of the caddisfly genus *Ceraclea* in eastern North America (Trichoptera: Leptoceridae). Ann. Entomol. Soc. Amer. 69:1039-1061.

Resh, V. H. and J. K. Jackson. 1993. Rapid bioassessment approaches to biomonitoring using benthic macroinvertebrates. Pp. 195-233 *in* D. M. Rosenberg and V. H. Resh, eds. Freshwater biomonitoring and benthic macroinvertebrates. Chapman and Hall. NY. 488 pp.

Resh, V. H., J. C. Morse, and I.D. Wallace. 1976. The evolution of the sponge feeding habit in the caddisfly genus *Ceraclea* (Trichoptera: Leptoceridae). Ann. Entomol. Soc. Amer. 69(5):937-941.

Resh, V. H. and J. D. Unzicker. 1973. Water quality monitoring and aquatic organisms: The importance of species identification. Water Pollution Control Federation. Jour. 47:9-19.

Ross, H. H. 1941. Descriptions and records of North American Trichoptera. Trans. Amer. Entomol. Soc. 67:35-126.

_____. 1944. The caddis flies, or Trichoptera, of Illinois. Illinois Natural History Survey

Bull. 23:1-326.

_____. 1947. Descriptions and records of North American Trichoptera, with synoptic notes. Trans. Amer. Entomol. Soc. 73:125-168.

_____. 1948a. Notes and descriptions of Nearctic Hydroptilidae (Trichoptera). J. Wash. Acad. Sci. 38:201-206.

_____. 1948b. New Nearctic Rhyacophilidae and Philopotamidae (Trichoptera). Ann. Entomol. Soc. Amer. 51:17-26.

_____. 1959. The relationship of three new species of *Triaenodes* from Illinois and Florida (Trichoptera). Ent. News. 20:39-45.

_____. 1965. The evolutionary history of *Phylocentropu*s (Trichoptera: Psychomyiidae). J. Kansas Entomol. Soc. 38:198-400.

Ross, H. H. and D. G. Gibbs. 1973. The subfamily relationships of the Dipseudopsinae (Trichoptera, Polycentropodidae). J. Georgia Entomol. Soc. 8:312-316.

Ross, H. H., J. C. Morse, and E. A. Gordon. 1971. New species of *Cheumatopsyche* from the southeastern United States (Hydropsychidae, Trichoptera). Proc. Biol. Soc. Washington. 84:301-306.

Ross, H. H. and D. C. Scott. 1974. A review of the genus *Agarodes* with descriptions of new species (Trichoptera: Sericostomatidae). J. Georgia Entomol. Soc. 9:147-155.

Ross, H. H. and J. B. Wallace. 1974. The North American genera of the family Sericostomatidae (Trichoptera). J. Georgia Entomol. Soc. 9:42-48.

Scheiring, J. F. 1985. Longitudinal and seasonal patterns of insect trophic structure in a Florida sand-hill stream. J. Kansas Ent. Soc. 58:207-219.

Schuster, G. A. and D. A. Etnier. 1978. A manual for the identification of the larvae of the caddisfly genera *Hydropsyche* Pictet and *Symphitopsyche* Ulmer in eastern and central North America (Trichoptera: Hydropsychidae): U.S. Environmental Protection Agency, Environmental Support Laboratory, EPA-600/4-78-060. 129 pp.

Schuster, G. A., and S. W. Hamilton. 1984. The genus *Phylocentropus* in North America. (Trichoptera: Polycentropodidae). Pp. 347-362 *in* J. C. Morse, ed. Proceedings of the Fourth International Symposium on Trichoptera. Vol. 30. Junk Publishers. 486 pp.

Scott, W. B. and E. L. Crossman. 1973. Freshwater fishes of Canada. Fish. Res. Board Can. Bull. 184:1-196.

Shefter, P. W., and G. B. Wiggins. 1986. A systematic study of the Nearctic larvae of the *Hydropsyche morosa* Group (Trichoptera: Hydropsychidae). Life Sci. Misc. Pub., Royal Ontario Mus., Toronto, Canada. 94 pp.

Sherberger, F. F., and J. B. Wallace. 1971. Larvae of the southeastern species of *Molanna*. J. Kansas Entomol. Soc. 44:217-224.

Singh, M. P., S. M. Smith, and A. D. Harrison. 1984. Life cycles, microdistribution, and food of two species of caddisflies (Trichoptera) in a wooded stream in southern Ontario. Can. J. Zool. 62:2582-2588.

Swegman, B. G. 1978. The occurrence of an intersex individual of *Psychomyia flavida* (Trichoptera). Ent. News. 89:187-188.

Sykora, J. L. and S. C. Harris. 1994. Five new species of *Hydroptila* from eastern United States (Insecta: Trichoptera: Hydroptilidae). Ann. Carnegie Mus. 63:67-75.

Unzicker, J. W., V. H. Resh, and J. C. Morse. 1982. Trichoptera. Pp. 9.1-9.138 *in* A. R. Brigham, W. V. Brigham, and A. Gnilka, eds. Aquatic insects and oligochaetes of North and South Carolina. Mahomet, Ill., Midwest Aquatic Enterprises. 837 pp.

Vaillant, F. 1965. Les larves de Trichopteres hydroptilides manguses de substrat. P. 165 *in* Proc. XII Int. Congr. Entomol. London. 1964.

Vineyard, F. F. and G. B. Wiggins. 1988. Further revision of the family Uenoidae (Trichoptera): Evidence for inclusion of Neophylacinae and Thremmatidae. Systematic Entomology. 13:361-372.

Wallace, J. B. 1975. Food partitioning in net-spinning Trichoptera larvae: *Hydropsyche venularis*, *Cheumatopsyche etrona*, and *Macronema zebratum* (Hydropsychidae). Ann. Entomol. Soc. Amer. 68:463-472.

Wallace, J. B. and D. Malas. 1976. The significance of the elongate, rectangular mesh found in capture nets of fine particle filter feeding Trichoptera larvae. Arch. Hydrobiol. 79:205-212.

Wallace, J. B. and F. F. Sherberger. 1970. The immature stage of *Anisocentropus pyraloides* (Trichoptera: Calamoceratidae). J. Georgia Entomol. Soc. 5:217-224.

_____. 1974. The larval retreat and feeding net of *Macronema carolina* Banks (Trichoptera: Hydropsychidae). Hydrobiologia. 45:177-184.

Wallace, J. B., J. R. Webster, and T. F. Cuffney. 1982. Stream detritus dynamics: Regulation by invertebrate consumers. Oecologia (Berl.). 53: 197-200.

Wallace, J. B., J. R. Webster, and W. R. Woodall. 1977. The role of filter feeders in flowing waters. Arch. Hydrobiol. 79:506-532.

Wallace, J. B., W. R. Woodall, and A. A. Staats. 1976. The larval dwelling-tube, capture net and food of *Phylocentropus placidus* (Trichoptera: Polycentropodidae). Ann. Entomol. Soc. Amer. 69:149-154.

Weaver, J. S., III. 1988. A synopsis of the North American Lepidostomatidae (Trichoptera). Amer. Entomol. Institute Contr. 24:1-141.

Weaver, J. S., III and H. Malicky. 1994. The genus *Dipseudopsis* Walker from Asia (Trichoptera: Dipseudopsidae). Tijdschrift voor Entomologie. 137:95:142.

Weaver, J. S., III and J. C. Morse. 1986. Evolution of feeding and case-making behavior in Trichoptera. J. N. Am. Benthol. Soc. 5:150-158.

Weaver, J. S., III and J. L. Sykora. 1979. The *Rhyacophila* of Pennsylvania with larval descriptions of *R. banksi* and *R. carpenteri* (Trichoptera: Rhyacophilidae). Ann. Carnegie Mus. 48:403-425.

Wells, A. and D. Cartwright. 1993. Females and immatures of the Australian caddisfly *Hyalopsyche disjuncta* Neboiss (Trichoptera), and a new family placement. Trans. Roy. Soc. S. Aust. 117:97-104.

Wiggins, G. B. 1954. The caddisfly *Beraea* in North America (Trichoptera). Contr. Roy. Ontario Mus. Zool. Paleont. 39:1-18.

_____. 1960. A preliminary systematic study of the North American larvae of the caddisfly family Phryganeidae (Trichoptera). Can. J. Zool. 38: 1153-1170.

_____. 1977. Larvae of the North American caddisfly genera (Trichoptera): Toronto, Univ. of Toronto Press. 401 pp.

_____. 1984. Trichoptera. Pp. 271-311 *in* R. W. Merritt, and K. W. Cummins, eds., An introduction to the aquatic insects of North America. Dubuque, Iowa. Kendall/Hunt Publishing Co. 720 pp.

Wojtowicz, J. A. 1982. A review of the adults and larvae of the genus *Pycnopsyche* (Trichoptera: Limnephilidae) with revision of the *Pycnopsyche scabripennis* (Rambur) and *Pycnopsyche lepida* (Hagen) Complexes. Ph.D. dissertation, University of Tennessee. 292 pp.

APPENDIX A: CHECKLIST OF FLORIDA CADDISFLIES.

The checklist includes both species that are known to occur in Florida, based on literature citations and material examined by us, and species that are likely to be found in the state based on their geographic distributions. The arrangement of taxa follows the scheme of classification proposed by Weaver and Morse (1986). **KEY: L=** larva known; **LU=** larva unknown; **? =** likely to occur in Florida; **??=** erroneously reported.

Suborder **ANNULIPALPIA**

Infraorder **CURVIPALPIA**

Superfamily **HYDROPSYCHOIDEA**

Family **Dipseudopsidae**

Phylocentropus carolinus Carpenter	L
P. harrisi Schuster & Hamilton ?	LU
P. lucidus (Hagen)	L
P. placidus (Banks)	L

Family **Hydropsychidae**

Cheumatopsyche burksi Ross	LU
C. campyla Ross ?	LU
C. edista Gordon	LU
C. geora Denning ?	LU
C. gordonae Lago & Harris	LU
C. miniscula (Banks) ?	LU
C. pasella Ross	LU
C. petersi Ross, Morse, & Gordon	LU
C. pettiti (Banks)	LU
C. pinaca Ross	LU
C. sordida (Hagen) ?	LU
C. virginica Denning	LU
Diplectrona modesta Banks	L
Hydropsyche (*H.*) *alabama* Lago & Harris ?	LU
H. (*H.*) *alvata* Denning	LU
H. (*H.*) *betteni* Ross ?	L
H. (*H.*) *decalda* Ross	L
H. (*H.*) *elissoma* Ross	L
H. (*H.*) *incommoda* Hagen	L
H. (*H.*) *mississippiensis* Flint	L
H. (*H.*) *orris* Ross	LU
H. (*H.*) *phalerata* Hagen	L
H. (*H.*) *rossi* Flint, Voshell, & Parker	L
H. (*H.*) *scalaris* Hagen ?	L
H. (*Ceratopsyche*) *sparna* Hagen ?	L
H. (*H.*) *venularis* Banks ?	L
Macrostemum carolina (Banks)	L

Potamyia flava (Hagen)	L
Family **Polycentropodidae**	
Cernotina calcea Ross	LU
C. spicata Ross	L
C. truncona Ross	LU
Cyrnellus fraternus (Banks)	L
Neureclipsis crepuscularis (Walker)	L
N. melco Ross	LU
Paranyctiophylax affinis (Banks)	LU
P. celta (Denning)	L
P. moestus (Banks)	L
P. morsei (Lago & Harris)	LU
P. serratus (Lago & Harris) ?	LU
Polycentropus blicklei Ross & Yamamoto	LU
P. cinereus Hagen	L
P. clinei (Milne) ?	LU
P. crassicornis Walker	LU
P. floridensis Lago & Harris	LU
P. interruptus (Banks)	L
P. nascotius Ross?	LU
Family **Psychomyiidae**	
Lype diversa (Banks)	L
Psychomyia flavida Hagen	L
Superfamily **PHILOPOTAMOIDEA**	
Family **Philopotamidae**	
Chimarra argentella (Ulmer)??	L
C. aterrima Hagen	LU
C. falculata Lago & Harris	LU
C. florida Ross	LU
C. moselyi Denning	LU
C. obscura (Walker)	LU
C. parasocia Lago & Harris	LU
Wormaldia moesta (Banks)	L
Infraorder **SPICIPALPIA**	
Superfamily **HYDROTILOIDEA**	
Family **Glossosomatidae**	
Protoptila sp.(probably *palina* Ross)	LU
Family **Hydroptilidae**	
Hydroptila acadia Ross	LU
H. alabama Harris & Kelley ?	LU
H. armata Ross	LU
H. berneri Ross	LU
H. circangula Harris	LU

H. disgalera Holzenthal & Kelley ?	LU
H. gunda Milne ?	LU
H. hamata Morton	L
H. latosa Ross	LU
H. lloganae Blickle	LU
H. maculata Banks	LU
H. metteei Harris ?	LU
H. molsonae Blickle	LU
*H. morse*i Sykora & Harris	LU
H. novicola Blickle & Morse?	LU
H. parastrepha Kelley & Harris	LU
H. quinola Ross	LU
H. remita Blickle & Morse	LU
H. scheiringi Harris ?	LU
H. wakulla Denning	LU
H. waubesiana Betten	L
Mayatrichia ayama Mosely	LU
Neotrichia alabamensis Kelley & Harris	LU
N. armitagei Harris	LU
N. minutisimella (Chambers)	LU
N. mobilensis Harris ?	LU
N. okopa Ross	LU
N. vibrans Ross	LU
Ochrotrichia okaloosa Harris	LU
O. provosti Blickle	LU
O. tarsalis (Hagen)	LU
Orthotrichia aegerfasciella (Chambers)	LU
O. baldufi Kingsolver & Ross	LU
O. cristata Morton	LU
O. curta Kingsolver & Ross	LU
O. dentata Kingsolver & Ross	LU
O. instabilis Denning	LU
Oxyethira abacatia Denning	LU
O. anabola Blickle ?	LU
O. elerobi (Blickle)	LU
O. florida Denning	LU
O. glasa (Ross)	LU
O. janella Denning	LU
O. kelleyi Harris & Armitage	LU
O. kingi Holzenthal & Kelley	LU
O. lumipollex Kelley & Harris ?	LU
O. lumosa Ross	LU
O. maya Denning	LU
O. novasota Ross	LU
O. pallida (Banks)	LU

O. roberti Roy & Harper	LU
O. savanniensis Kelley & Harris	LU
O. setosa Denning	LU
O. sininsigne Kelley	LU
O. verna Ross	LU
O. zeronia Ross	LU
Stactobiella martynovi Blickle & Denning ?	LU
S. palmata (Ross) ?	L

Superfamily **RHYACOPHILOIDEA**

Family **Rhyacophilidae**

Rhyacophila carolina Banks	L
R. ledra Ross ?	L

Suborder **INTEGRIPALPIA**

Infraorder **PLENITENTORIA**

Superfamily **LIMNEPHILOIDEA**

Family **Brachycentridae**

Brachycentrus americanus (Banks)??	L
B. chelatus Ross	L
B. numerosus (Say)	L
Micrasema rusticum (Hagen)	L
M. wataga Ross	L
Micrasema n. sp.	L

Family **Lepidostomatidae**

Lepidostoma griseum (Banks)	LU
L. latipenne (Banks)	LU
L. morsei Weaver	LU
L. togatum (Hagen)?	LU
Lepidostoma sp. (nr. *serratum*)	LU

Family **Limnephilidae**

Ironoquia punctatissima (Walker)	L
Pycnopsyche guttifera (Walker) ??	L
P. indiana (Ross)	L
P. antica (Walker)	L

Superfamily **PHRYGANEOIDEA**

Family **Phryganeidae**

Agrypnia vestita (Walker)	L
Banksiola concatenata (Walker)	LU
Ptilostomis ocellifera (Walker)?	L
Ptilostomis postica (Walker)	LU

Family **Uenoidae**

Neophylax concinnus MacLachlan	L

Superfamily **LEPTOCEROIDEA**

Family **Calamoceratidae**

Anisocentropus pyraloides (Walker)	L
Heteroplectron americanum (Walker)	L

Family **Leptoceridae**

Ceraclea cancellata (Betten)	L
C. diluta (Hagen)	L
C. flava (Banks)	L
C. floridana (Banks)	LU
C. maculata (Banks)	L
C. nepha (Ross)	L
C. ophioderus (Ross)	LU
C. protonepha Morse & Ross	L
C. resurgens (Walker)	L
C. slossonae (Banks)	L
C. spongillovorax (Resh)	L
C. tarsipunctata (Vorhies)	L
C. transversa (Hagen)	L
Leptocerus americanus (Banks)	L
Nectopsyche albida (Walker)??	LU
N. candida (Hagen)	L
N. exquisita (Walker)	L
N. paludicola Harris	LU
N. pavida (Hagen)	L
N. spiloma (Ross)?	L
N. tavara (Ross)	L
Oecetis avara (Banks)	L
O. cinerascens (Hagen)	L
O. daytona Ross	LU
O. ditissa Ross	LU
O. floridanus (Banks)	LU
O. georgia Ross	L
O. inconspicua (Walker)	L
O. morsei Bueno-Soria	L
O. nocturna Ross	L
O. osteni Milne	L
O. parva (Banks)	L
O. persimilis (Banks)	L
O. porteri Ross	L
O. pratelia Denning	LU
O. sphyra Ross	L
Oecetis sp. A Floyd	L
Oecetis sp. C Floyd	L
Oecetis sp. F Floyd	L
Setodes dixiensis Holzenthal?	L

S. guttatus (Banks)	L
Setodes n. sp.	L
Triaenodes abus Milne	L
T. flavescens Banks	L
T. florida Ross	L
T. furcellus Ross	L
T. helo Milne	L
T. ignitus (Walker)	L
T. injustus (Hagen) ?	L
T. marginatus Sibley ?	L
T. melacus Ross ?	L
T. nox Ross	L
T. ochraceus (Betten & Mosely)	L
T. perna Ross	L
T. smithi Ross ?	LU
T. tardus Milne	L
Triaenodes n. sp. A	L
Triaenodes n. sp. C	L
Family **Molannidae**	
Molanna blenda Sibley	L
M. tryphena Betten	L
M. ulmerina Navas	LU
Family **Odontoceridae**	
Psilotreta frontalis Banks	L
P. labida Ross ?	L
Infraorder **BREVITENTORIA**	
Superfamily **SERICOSTOMATOIDEA**	
Family **Beraeidae**	
Beraea gorteba Ross ?	L
Family **Helicopsychidae**	
Helicopsyche borealis Hagen	L
Family **Sericostomatidae**	
Agarodes crassicornis (Walker)	LU
A. libalis Ross and Scott	L
A. ziczac Ross and Scott	LU
Agarodes n. sp.	LU

APPENDIX B: SPECIES DISTRIBUTION OF FLORIDA CADDISFLIES

Introduction:

The following appendix is intended as a supplement for the preceding manual. Since less than one half of the known caddisfly species in the state can be determined to species level from the larval stage, benthologists are often left to generic level determinations and only rough estimates of species richness. The data tables presented below are a survey of the collection localities and dates for the caddisfly species known to occur in Florida

Knowledge of the geographic distribution of caddisflies can be useful in number of ways. It can provide the biologist with a preliminary idea of what species may be likely to occur in a given study area and from this sampling strategies may then be selectively chosen for certain target species. The efficacy of the benthic sampling strategies can later be evaluated through the comparison of taxa sampled with past collection records. Additionally, the collection dates of the larval and alate forms often provides a general overview of the seasonality of the species, which is essential in any biomonitoring exercise.

The data tables presented below, one for each caddisfly family and arranged alphabetically, were extracted from the database which we are steadily updating as means to keep track of new collection records. There are approximately 1300 collection records compiled in the tables. The information sources we used to gather these data include the following: 1) larval material loaned to us and examined during the coarse of writing this manual; 2) caddisfly collections (adults & larvae) housed within the Florida A&M collection; and 3) records gleaned from the literature (largely taxonomic papers). With respect to all three of these sources, the data tables are a survey and not a completely exhaustive account.

Data fields for each family table include the following: **Species** (scientific names, arranged alphabetically); **Basin** (USGS basin where the collection was made); **Waterbody** (name of the river, stream, or lake where the species was collected); **County** (county where collected); **Stage** (Life stage collected, A=adult; L=larva; P=pupa); **Date Coll.** [(the month, day, and year the species was collected (if the record indicated a range of dates, one month or less, over which time the specimens were collected, then a mid-date was used)]; **Source** (source of the collection record, this includes: literature records enclosed in parentheses (see Literature Cited section for complete citation); the abbreviated names of the individual or agency which loaned us material; and caddisfly collections housed at Florida A&M, abbreviated as FAMU); **Lat.** & **Long.** [latitude and longitude of collection locality, often an approximation (useful for producing computer generated distribution maps)]; and **Additional Locality Info.** (other locality information which may be useful for more exactly determining the locality of the collection site).

The veracity and completeness of the following data records was dictated by the amount of information presented with the collection accounts and the locality labels of the given sources. In many cases complete collection information was not available and thus could not be included in the tables. Many times collection records are vague as to exact collection locality, and often in the past, collection accounts simply indicated the county where the specimen was collected, with no other locality information given.

Acknowledgement:

We extend our sincere thanks to Ellen McCarron (FDEP) for providing the computer software which was used in determining the latitude/longitude coordinates of the various collection localities.

TRICHOPTERA DATABASE: FLORIDA BRACHYCENTRIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Brachycentrus chelatus	Apalachicola R	Crooked Ck	Gadsden	L	7-8-1992	FDEP-Tallahassee	30 35 02	84 52 58	Hwy. 270
Brachycentrus chelatus	Blackwater R	Big Coldwater Ck	Santa Rosa	L	2-1-1969	(Flint, 1984)	30 42 33	86 58 18	Rt. S-191
Brachycentrus chelatus	Blackwater R	Blackwater R	Okaloosa	L	8-22-1974	FAMU Coll.	30 44 20	86 47 12	FAMU Biological Station
Brachycentrus chelatus	Blackwater R	Blackwater R	Okaloosa	L	9-14-1976	FDEP-Pensacola	30 50 00	86 44 02	Hwy. 4
Brachycentrus chelatus	Blackwater R	Blackwater R	Okaloosa	L	2-15-1977	FDEP-Pensacola	30 50 00	86 44 02	Hwy. 4
Brachycentrus chelatus	Blackwater R	Blackwater R	Santa Rosa	A	3-10-1972	(Flint, 1984)	30 42 00	86 53 00	Blackwater R State Forest
Brachycentrus chelatus	Blackwater R	Blackwater R	Santa Rosa	L	10-30-1971	(Flint, 1984)	30 43 04	86 48 35	Riley Landing, 3 mi. NW Holt
Brachycentrus chelatus	Blackwater R	Blackwater R	Santa Rosa	L	4-8-1972	(Flint, 1984)	30 43 04	86 48 35	Riley Landing, 3 mi. NW Holt
Brachycentrus chelatus	Blackwater R	Blackwater R	Santa Rosa	L	5-9-1972	(Flint, 1984)	30 43 04	86 48 35	Riley Landing, 3 mi. NW Holt
Brachycentrus chelatus	Chipola R	Juniper Ck	Calhoun	L	5-13-1976	FDEP-Pensacola	30 21 32	85 12 44	S.R. 73
Brachycentrus chelatus	Chipola R	Juniper Ck	Calhoun	L	11-22-1977	FDEP-Pensacola	30 21 32	85 12 44	S.R. 73
Brachycentrus chelatus	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Brachycentrus chelatus	Choctawhatchee Bay	Rocky Ck	Walton	A	3-14-1979	(Flint, 1984)	30 39 00	86 20 00	Eglin Air Force Base
Brachycentrus chelatus	Choctawhatchee Bay	Rocky Ck	Walton	A	4-20-1979	(Flint, 1984)	30 39 00	86 20 00	Eglin Air Force Base
Brachycentrus chelatus	Choctawhatchee Bay	Rocky Ck	Walton	A	5-11-1979	(Flint, 1984)	30 39 00	86 20 00	Eglin Air Force Base
Brachycentrus chelatus	Choctawhatchee Bay	Rocky Ck	Walton	L	7-14-1978	(Flint, 1984)	30 39 00	86 20 00	Eglin Air Force Base
Brachycentrus chelatus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	2-5-1986	FAMU	30 27 03	84 38 36	CR-267
Brachycentrus chelatus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	7-9-1986	FAMU	30 27 03	84 38 36	CR-267
Brachycentrus chelatus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	12-3-1987	FAMU	30 27 03	84 38 36	CR-267
Brachycentrus chelatus	Ochlockonee R	Telogia Ck	Gadsden	L	7-1-1987	FAMU	30 35 40	84 42 36	CR-270A
Brachycentrus chelatus	Yellow R	Titi Ck	Okaloosa	L	11-22-1970	(Flint, 1984)	30 42 00	86 28 00	Rt. 211, Eglin Air Force Base
Brachycentrus numerosus	Choctawhatchee R	Holmes Ck	Washington	L	8-8-1979	FDEP-Pensacola	30 37 38	85 42 45	S.R. 79
Brachycentrus numerosus	Escambia R	Escambia R	Escambia	L	10-20-1977	FDEP-Pensacola	30 58 01	87 13 56	Hwy. 4
Brachycentrus numerosus	St. Andrews Bay	Econfina Ck	Bay	L	6-28-1993	FDEP-Pensacola	30 23 06	85 33 25	S.R. 388
Brachycentrus numerosus	Yellow R	Yellow R	Okaloosa	L	2-16-1978	FDEP-Pensacola	30 55 30	86 33 34	S.R. 189
Brachycentrus numerosus	Yellow R	Yellow R	Okaloosa	L	6-22-1993	FDEP-Pensacola	30 55 30	86 33 34	S.R. 189
Micrasema n. sp.	Blackwater R	Big Coldwater Ck	Santa Rosa	L	7-22-1972	(Chapin, 1978)	30 52 55	86 57 29	Rt. 4
Micrasema n. sp.	Blackwater R	Big Coldwater Ck	Santa Rosa	L	11-23-1976	FDEP-Pensacola	30 46 36	87 01 06	below confluence E and W fork
Micrasema n. sp.	Blackwater R	Big Coldwater Ck	Santa Rosa	L	5-4-1977	FDEP-Pensacola	30 52 55	86 57 29	E fork @ Hwy. 4
Micrasema n. sp.	Blackwater R	Big Juniper Ck	Santa Rosa	L	5-4-1977	FDEP-Pensacola	30 51 47	86 54 16	Hwy. 4
Micrasema n. sp.	Blackwater R	Blackwater R	Okaloosa	A	4-7-1968	(Chapin, 1978)	30 52 55	86 43 52	4.5 mi. NW Cannon Town
Micrasema n. sp.	Blackwater R	Blackwater R	Okaloosa	A	5-1-1970	(Chapin, 1978)	30 56 00	85 44 09	Kennedy Br., .6 mi. W Blackman

TRICHOPTERA DATABASE: FLORIDA BRACHYCENTRIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Micrasema n. sp.	Blackwater R	Blackwater R	Santa Rosa	L	3-10-1972	(Chapin, 1978)	30 42 00	86 53 00	Blackwater R St. Forest
Micrasema n. sp.	Blackwater R	Blackwater R	Santa Rosa	L	5-9-1972	(Chapin, 1978)	30 43 04	86 48 35	Riley Landing, 3 mi. NW Holt
Micrasema n. sp.	Blackwater R	Juniper Ck	Okaloosa	L	5-24-1977	FDEP-Pensacola	30 33 17	86 31 59	S.R. 123
Micrasema n. sp.	Choctawhatchee Bay	Alaqua Ck	Walton	L,P	1-12-1971	(Chapin, 1978)	30 33 25	86 10 22	Rt. 282
Micrasema n. sp.	Choctawhatchee Bay	Lafayette Ck	Walton	A		(Chapin, 1978)	30 31 07	86 02 55	Eglin A.F.B., 10 mi. W Rt. 81
Micrasema n. sp.	Choctawhatchee Bay	Lafayette Ck	Walton	A	12-14-1970	(Chapin, 1978)	30 29 35	86 07 31	Rt. 20
Micrasema n. sp.	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Micrasema n. sp.	Choctawhatchee R	Black Ck	Walton	A	5-3-1971	(Chapin, 1978)	30 28 27	85 59 17	Rt. 20
Micrasema n. sp.	Pensacola Bay	Turtle Ck	Okaloosa	A	11-21-1970	(Chapin, 1978)	30 32 24	86 39 54	Eglin A.F.B. 6 mi. W Rt. 85
Micrasema n. sp.	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Micrasema n. sp.	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Micrasema n. sp.	Yellow R	Turkey Hen Ck	Okaloosa	A	12-22-1970	(Chapin, 1978)	30 40 52	86 34 33	Eglin A.F.B. dirt rd. 211
Micrasema rusticum	St. Andrews Bay	Econfina Ck	Bay	L	11-24-1993	FDEP-Pensacola	30 33 20	85 26 06	Scott Rd
Micrasema rusticum	Yellow R	Shoal R	Okaloosa	L	2-22-1978	FDEP-Pensacola	30 47 26	86 25 07	C-393
Micrasema wataga	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Micrasema wataga	Blackwater R	Big Coldwater Ck	Santa Rosa	L	5-4-1977	FDEP-Pensacola	30 52 55	86 57 29	E fork @ Hwy. 4
Micrasema wataga	Blackwater R	Big Juniper Ck	Santa Rosa	L	5-4-1977	FDEP-Pensacola	30 51 47	86 54 16	Hwy. 4
Micrasema wataga	Blackwater R	Blackwater R	Okaloosa	L	4-12-1978	FDEP-Pensacola	30 50 00	86 44 02	Hwy. 4
Micrasema wataga	Santa Fe R	High Springs	Alachua	L	10-9-1976	(Chapin, 1978)	29 50 00	82 35 00	none
Micrasema wataga	Santa Fe R	Santa Fe R	Columbia	L	11-1-1975	(Chapin, 1978)	29 52 00	82 45 00	none
Micrasema wataga	Yellow R	Big Horse Ck	Okaloosa	L	6-23-1993	FDEP-Pensacola	30 55 20	86 35 44	S.R. 2

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA CALAMOCERATIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Anisocentropus pyraloides	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Beaver Dam Ck	Liberty	A	8-30-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Beaver Dam Ck	Liberty	L	12-7-1994	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Crooked Ck	Gadsden	L	7-8-1992	FAMU	30 34 58	84 53 02	Hwy 270
Anisocentropus pyraloides	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Kelley Branch	Liberty	L	3-11-1994	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	L	12-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Apalachicola R	Little Sweetwater Ck	Liberty	L	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Anisocentropus pyraloides	Blackwater R	Blackwater R	Okaloosa	L	3-18-1979	FAMU	30 50 00	86 44 02	Hwy 4 (Cotton bridge)
Anisocentropus pyraloides	Blackwater R	Coldwater Ck	Santa Rosa	L		(Wallace & Sherberger, 1970)	30 50 00	87 00 00	none
Anisocentropus pyraloides	Chipola R	unknown	Jackson	L		(Wallace & Sherberger, 1970)	30 37 32	85 09 11	3.5 mi N Altha
Anisocentropus pyraloides	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Anisocentropus pyraloides	Choctawhatchee Bay	Rocky Ck	Walton	L		(Scheiring, 1985)	30 39 00	86 20 00	Eglin Air Force Base
Anisocentropus pyraloides	Choctawhatchee R	Bruce Ck	Walton	L	9-6-1990	FDEP-Tallahassee	30 37 00	86 02 00	none
Anisocentropus pyraloides	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	3 mi NW Havana, C-159
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	A	10-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	A	5-7-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	8-14-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	10-15-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	12-5-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	2-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	4-8-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	6-10-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	8-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267

TRICHOPTERA DATABASE: FLORIDA CALAMOCERATIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	10-14-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	12-7-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	2-11-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	8-11-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	9-28-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	1-27-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	8-18-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	FAMU Farm St	Gadsden	L	3-30-1995	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Anisocentropus pyraloides	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	10 mi S Quincy, C-267
Anisocentropus pyraloides	Ochlockonee R	Ocklawaha Ck	Gadsden	L	12-3-1987	FAMU	30 27 03	84 38 36	10 mi S Quincy, C-267
Anisocentropus pyraloides	Ochlockonee R	Pittman Ck	Liberty	L	4-3-1974	FAMU	30 23 16	84 40 16	Hwy 20
Anisocentropus pyraloides	St. Andrews Bay	Econfina Ck	Bay	L	2-21-1995	FAMU	30 33 48	85 23 20	US Hwy. 231, 10 km N Fountain
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	A	5-19-1980	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	A	7-29-1980	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	A	8-14-1980	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	A	6-15-1981	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	10-10-1991	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	12-3-1991	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	2-5-1992	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	4-1-1992	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	8-5-1992	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	9-19-1992	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	9-29-1992	FAMU	30 24 30	84 03 50	US Hwy 27
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	11-2-1992	FAMU	30 24 30	84 03 50	US Hwy 27
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	12-2-1992	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	2-4-1993	FAMU	30 24 30	84 03 50	US Hwy 27
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	2-4-1993	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	St. Marks R	Burnt Mill Ck	Jefferson	L	4-1-1993	FAMU	30 25 31	84 01 11	CR-59
Anisocentropus pyraloides	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Anisocentropus pyraloides	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Heteroplectron americanum	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol

TRICHOPTERA DATABASE: FLORIDA CALAMOCERATIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Heteroplectron americanum	Apalachicola R	Kelley Branch	Liberty	L	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Heteroplectron americanum	Apalachicola R	Kelley Branch	Liberty	L	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Heteroplectron americanum	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Heteroplectron americanum	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Heteroplectron americanum	Apalachicola R	Little Sweetwater Ck	Liberty	L	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA DIPSEUDOPSIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Phylocentropus carolinus	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Phylocentropus carolinus	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Phylocentropus lucidus	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Phylocentropus lucidus	Apalachicola R	Beaver Dam Ck	Liberty	A	8-30-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Phylocentropus lucidus	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Phylocentropus lucidus	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Phylocentropus lucidus	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Phylocentropus lucidus	Apalachicola R	unnamed stream	Liberty	A	3-22-1995	FAMU	30 27 55	84 59 07	ABRP, 5 km N Bristol
Phylocentropus lucidus	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off SR-267
Phylocentropus lucidus	Ochlockonee R	FAMU Farm St	Gadsden	A	10-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off SR-267
Phylocentropus lucidus	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off SR-267
Phylocentropus lucidus	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off SR-267
Phylocentropus placidus	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Phylocentropus placidus	Apalachicola R	unnamed stream	Liberty	A	12-7-1994	FAMU	30 27 55	84 59 07	ABRP, 5 km N Bristol
Phylocentropus placidus	Aucilla R	Aucilla R	Jefferson	A	10-14-1993	FAMU	30 16 25	83 51 25	SR-257
Phylocentropus placidus	Chipola R	Chipola R	Calhoun	A	8-1-1972	FAMU	30 25 52	85 10 19	SR-20
Phylocentropus placidus	St. Johns R, lower	Pottsburg Ck	Duval	A	7-21-1960	FAMU	30 15 28	81 34 53	Belfort Rd.

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA GLOSSOSOMATIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Protoptila sp. (prob. palina)	Chipola R	Chipola R	Calhoun	L	9-2-1976	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Protoptila sp. (prob. palina)	Chipola R	Chipola R	Calhoun	L	7-19-1977	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Protoptila sp. (prob. palina)	Choctawhatchee R	Holmes Ck	Washington	L	7-21-1977	FDEP-Pensacola	30 37 38	85 42 45	SR-79, Vernon

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA HELICOPSYCHIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Helicopsyche borealis	Alapaha R	Alapaha R	Hamilton	L	8-9-1995	(J. Epler, pers. comm.)			just S of state line
Helicopsyche borealis	Chipola R	Chipola R	Calhoun	L	9-2-1976	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Helicopsyche borealis	Chipola R	Chipola R	Calhoun	L	7-19-1977	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Helicopsyche borealis	Santa Fe R	Santa Fe R	Gilchrist	A	5-6-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Helicopsyche borealis	Suwannee R, lower	Suwannee R	Gilchrist	L		SRWMD	29 47 42	82 55 11	Rock Bluff

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA HYDROPSYCHIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Cheumatopsyche burksi	Blackwater R	unknown	Okalossa	A		(Gordon, 1974)	30 44 00	86 47 00	NW Holt
Cheumatopsyche burksi	Charlotte Harbor	unknown	Charlotte	A	9-19-1968	FAMU	26 50 55	82 02 09	6 mi S Punta Gorda
Cheumatopsyche burksi	Everglades West Coast	unknown	Collier	A	4-8-1958	FAMU	25 54 07	81 18 14	Ochopee
Cheumatopsyche burksi	Kissimmee R	unknown	Highlands	A		(Gordon, 1974)	27 11 20	81 20 15	Archbold Biological Station
Cheumatopsyche burksi	Oklawaha R	unknown	Alachua	A	9-14-1972	FAMU	29 39 07	82 19 31	Gainesville
Cheumatopsyche burksi	Oklawaha R	unknown	Alachua	A	9-30-1972	FAMU	29 39 07	82 19 31	Gainesville
Cheumatopsyche burksi	Oklawaha R	unknown	Lake	A	3-23-1936	(Ross, 1941)	28 48 15	81 43 33	Tavares
Cheumatopsyche burksi	Peace R	Six mile Ck	Polk	A	3-7-1951	FAMU	27 47 05	81 49 31	none
Cheumatopsyche burksi	Peace R	unknown	Hardee	A	3-20-1951	FAMU	27 30 00	81 48 00	small stream @ US 17
Cheumatopsyche burksi	Peace R	unknown	Highlands	A		(Gordon, 1974)	27 28 23	81 31 41	Highlands Hammock State Park
Cheumatopsyche burksi	Peace R	unknown	Polk	A	8-9-1960	FAMU	28 01 20	81 43 58	Winter Haven
Cheumatopsyche burksi	Santa Fe R	Santa Fe R	Gilchrist	A	5-6-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Cheumatopsyche burksi	Southeast FL Coast	unknown	Palm Beach	A	11-18-1959	FAMU	26 42 55	80 03 13	West Palm Beach
Cheumatopsyche burksi	St. Johns R, upper	Juniper Springs	Marion	A		(Gordon, 1974)	29 10 43	81 42 29	Juniper Springs
Cheumatopsyche burksi	St. Johns R, upper	Rock Springs	Orange	A		(Gordon, 1974)	28 45 10	81 30 18	Rock Springs
Cheumatopsyche burksi	St. Johns R, upper	St. Johns R	Putnam	A	4-9-1964	FAMU	29 27 08	81 39 30	Welaka, UF reserve at fire tower
Cheumatopsyche burksi	unknown	unknown	Alachua	A	4-11-1958	FAMU	29 39 07	82 19 31	none
Cheumatopsyche burksi	unknown	unknown	Hillsborough	A	5-19-1960	FAMU	27 56 52	82 27 31	Tampa
Cheumatopsyche burksi	unknown	unknown	Hillsborough	A	3-22-1961	FAMU	27 56 52	82 27 31	Tampa
Cheumatopsyche burksi	unknown	unknown	Hillsborough	A	3-25-1963	FAMU	27 56 16	82 17 10	Brandon
Cheumatopsyche burksi	unknown	unknown	Lee	A	9-7-1961	FAMU	26 38 26	81 52 20	Fort Myers
Cheumatopsyche burksi	unknown	unknown	Santa Rosa	A		(Gordon, 1974)	30 45 00	87 00 00	none
Cheumatopsyche burksi	unknown	unknown	unknown	A		(Gordon, 1974)			Plamdale, Tamiami Trail
Cheumatopsyche edista	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW Havana
Cheumatopsyche edista	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	SR-12, 5 mi SW of Havana
Cheumatopsyche gordonae	Choctawhatchee Bay	Rocky Ck	Walton	A	4-20-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche gordonae	Choctawhatchee Bay	Rocky Ck	Walton	A	4-25-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche gordonae	Choctawhatchee Bay	Rocky Ck	Walton	A	5-11-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche gordonae	Choctawhatchee Bay	Rocky Ck	Walton	A	5-20-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche gordonae	Choctawhatchee Bay	Rocky Ck	Walton	A	6-8-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche gordonae	Yellow R	Bull Ck	Okaloosa	A	8-16-1979	(Lago & Harris, 1983)	30 40 17	86 25 56	Eglin Air Force Base
Cheumatopsyche gordonae	Yellow R	Bull Ck	Okaloosa	A	8-19-1979	(Lago & Harris, 1983)	30 40 17	86 25 56	Eglin Air Force Base
Cheumatopsyche pasella	Blackwater R	Blackwater R	Okaloosa	A	4-12-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Cheumatopsyche pasella	Blackwater R	Blackwater R	Okaloosa	A	4-13-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Cheumatopsyche pasella	Chipola R	unknown	Jackson	A	4-18-1963	FAMU	30 48 51	85 14 00	Florida Caverns State Park

TRICHOPTERA DATABASE: FLORIDA HYDROPSYCHIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Cheumatopsyche pasella	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 55	86 19 52	Eglin Air Force Base
Cheumatopsyche pasella	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	SR-12, 5 mi SW of Havana
Cheumatopsyche pasella	Ochlockonee R	unknown	Gadsden	A	4-20-1958	FAMU	30 35 15	84 35 00	Quincy
Cheumatopsyche petersi	Blackwater R	Blackwater R	Okaloosa	A		(Ross et al., 1971)	30 43 28	86 47 30	Bryant Bridge, 2.5 mi W of Holt
Cheumatopsyche petersi	Blackwater R	Blackwater R	Okaloosa	A	4-7-1968	(Ross et al., 1971)	30 52 54	86 43 52	4.5 mi NW Cannon Town
Cheumatopsyche petersi	Blackwater R	Blackwater R	Okaloosa	A	4-25-1970	(Ross et al., 1971)	30 52 54	86 43 52	Peadton Br., 4.5 mi NW Cannon Tow
Cheumatopsyche petersi	Blackwater R	Blackwater R	Okaloosa	A	5-1-1970	(Ross et al., 1971)	30 56 00	86 44 09	Kennedy Br., 6 mi W of Blackman
Cheumatopsyche petersi	Blackwater R	Blackwater R	Okaloosa	A	6-1-1970	(Ross et al., 1971)	30 45 00	86 47 00	Lily Bluff, 3 mi NW of Holt
Cheumatopsyche petersi	Blackwater R	Blackwater R	Okaloosa	A	4-13-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Cheumatopsyche petersi	Blackwater R	Blackwater R	Santa Rosa	A	4-24-1970	(Ross et al., 1971)	30 45 28	86 47 31	Field station 3.5 mi NW of Holt
Cheumatopsyche petersi	Blackwater R	Blackwater R	Santa Rosa	A	5-9-1970	(Ross et al., 1971)	30 45 28	86 47 31	Field station 3.5 mi NW of Holt
Cheumatopsyche petersi	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche pettiti	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche pettiti	Kissimmee R	Lake Placid	Highlands	A		(Gordon, 1974)	27 15 00	81 22 00	Lake Placid
Cheumatopsyche pettiti	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159
Cheumatopsyche pettiti	Oklawaha R	unknown	Alachua	A	9-7-1972	FAMU	29 39 07	82 19 31	Gainesville
Cheumatopsyche pettiti	Oklawaha R	unknown	Alachua	A	9-23-1972	FAMU	29 39 07	82 19 31	Gainesville
Cheumatopsyche pettiti	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	Rt. 41
Cheumatopsyche pettiti	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Cheumatopsyche pettiti	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Cheumatopsyche pettiti	unknown	unknown	Alachua	A	4-15-1958	FAMU	29 39 07	82 19 31	none
Cheumatopsyche pettiti	unknown	unknown	Alachua	A	4-24-1977	FAMU	29 45 00	82 37 30	9 mi NW of Gainesville, UF hort.
Cheumatopsyche pettiti	unknown	unknown	Jefferson	A	4-8-1958	FAMU	30 32 43	83 52 13	Monticello
Cheumatopsyche pinaca	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159
Cheumatopsyche pinaca	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	SR-12, 5 mi SW of Havana
Cheumatopsyche pinaca	Oklawaha R	unknown	Alachua	A		(Gordon, 1974)	29 39 07	82 19 31	Gainesville
Cheumatopsyche pinaca	Santa Fe R	Santa Fe R	Gilchrist	A	5-6-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Cheumatopsyche pinaca	Santa Fe R	Santa Fe R	Gilchrist	A	5-7-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Cheumatopsyche pinaca	St. Johns R, upper	Juniper Springs	Marion	A		(Gordon, 1974)	29 10 43	81 42 29	Juniper Springs
Cheumatopsyche pinaca	St. Johns R, upper	Rock Springs	Orange	A		(Gordon, 1974)	28 45 10	81 30 18	Rock Springs
Cheumatopsyche pinaca	St. Johns R, upper	St. Johns R	Putnam	A	4-9-1964	FAMU	29 27 08	81 39 30	Welaka, UF reserve at fire tower
Cheumatopsyche pinaca	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	Rt. 41
Cheumatopsyche pinaca	Upper Suwannee R	Suwannee R	Hamilton	A	3-29-1977	FAMU	30 19 54	82 46 01	Stephen Foster Memorial
Cheumatopsyche pinaca	Withlacoochee R, N.	Withlacoochee R	Madison	A	5-13-1952	FAMU			Beck Station 3
Cheumatopsyche pinaca	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Cheumatopsyche pinaca	unknown	unknown	Baker	A	4-12-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90

TRICHOPTERA DATABASE: FLORIDA HYDROPSYCHIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Cheumatopsyche pinaca	unknown	unknown	Baker	A	5-16-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90
Cheumatopsyche pinaca	unknown	unknown	Baker	A	6-2-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90
Cheumatopsyche pinaca	unknown	unknown	Baker	A	6-2-1977	FAMU	30 22 58	82 19 54	Osceola Nat. For., E forest tower
Cheumatopsyche pinaca	unknown	unknown	Baker	A	7-14-1977	FAMU	30 15 26	82 26 52	Osceola Nat. For., jct. I-10 & S-250
Cheumatopsyche pinaca	unknown	unknown	Columbia	A	4-12-1977	FAMU	30 12 00	82 30 00	Osceola Nat. For., jct.S-234 & Rt 90
Cheumatopsyche virginica	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Cheumatopsyche virginica	Kissimmee R	unknown	Highlands	A		(Gordon, 1974)	27 11 20	81 20 15	Archbold Biological Station
Cheumatopsyche virginica	Kissimmee R	unknown	Highlands	A		(Gordon, 1974)	27 14 42	81 17 54	Parker Island
Cheumatopsyche virginica	Oklawaha R	Redwater Lake	Putnam	A	4-23-1966	FAMU	29 34 00	82 01 00	Weems property
Cheumatopsyche virginica	Oklawaha R	unknown	Alachua	A	9-23-1972	FAMU	29 39 07	82 19 31	Gainesville
Cheumatopsyche virginica	Peace R	unknown	Highlands	A		(Gordon, 1974)	27 28 23	81 31 41	Highlands Hammock State Park
Cheumatopsyche virginica	Peace R	unknown	Polk	A	8-9-1960	FAMU	28 01 20	81 43 58	Winter Haven
Cheumatopsyche virginica	Santa Fe R	unknown	Alachua	A	3-30-1954	FAMU	29 47 47	82 29 42	Alachua
Cheumatopsyche virginica	St. Johns R, upper	St. Johns R	Putnam	A	4-9-1964	FAMU	29 27 08	81 39 30	Welaka, UF reserve at fire tower
Cheumatopsyche virginica	St. Johns R, upper	St. Johns R	Putnam	A	4-9-1964	FAMU	29 27 08	81 39 30	Welaka, UF reserve at sawmill
Cheumatopsyche virginica	Suwannee R, upper	Suwannee R	Hamilton	A	3-29-1977	FAMU	30 19 54	82 46 01	Stephen Foster Memorial
Cheumatopsyche virginica	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Cheumatopsyche virginica	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Cheumatopsyche virginica	unknown	unknown	Baker	A	4-6-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90
Cheumatopsyche virginica	unknown	unknown	Baker	A	4-12-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90
Cheumatopsyche virginica	unknown	unknown	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For.,OceanPond rec.are
Cheumatopsyche virginica	unknown	unknown	Baker	A	4-20-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90
Cheumatopsyche virginica	unknown	unknown	Baker	A	5-16-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For.,OceanPond rec.are
Cheumatopsyche virginica	unknown	unknown	Columbia	A	4-12-1977	FAMU	30 12 00	82 30 00	Osceola Nat. For., jct.S-234 & Rt 90
Diplectrona modesta	Apalachicola R	Beaver Dam Ck	Liberty	L	4-7-1994	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Diplectrona modesta	Apalachicola R	Kelley Branch	Liberty	L	3-11-1994	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Diplectrona modesta	Apalachicola R	Kelley Branch	Liberty	L	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Diplectrona modesta	Apalachicola R	Little Sweetwater Ck	Liberty	L	3-11-1994	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Diplectrona modesta	Apalachicola R	Little Sweetwater Ck	Liberty	L	12-7-1994	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Diplectrona modesta	Apalachicola R	Sweetwater Ck	Liberty	L	4-18-1995	FAMU	30 31 58	84 58 03	CR-270
Diplectrona modesta	Apalachicola R	unnamed	Liberty	L	3-11-1994	FAMU	30 27 55	84 59 07	ABRP, just NE of bluff overlook
Diplectrona modesta	Apalchicola R	Crooked Ck	Gadsden	L	7-8-1992	FDEP-Tallahassee	30 35 02	84 52 58	Hwy 270
Diplectrona modesta	Blackwater R	Big Juniper Ck	Santa Rosa	L	12-16-1978	FAMU	30 51 47	86 54 16	Hwy 4
Diplectrona modesta	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Diplectrona modesta	Choctawhatchee Bay	Rocky Ck	Walton	L		(Scheiring, 1985)	30 39 00	86 20 00	Eglin Air Force Base
Diplectrona modesta	Ochlockonee	FAMU Farm St	Gadsden	L	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267

TRICHOPTERA DATABASE: FLORIDA HYDROPSYCHIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	6-12-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	8-14-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	10-15-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	12-5-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	2-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	4-8-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	6-10-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	8-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	10-14-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	12-7-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	2-11-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	4-7-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	9-28-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	1-27-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	FAMU Farm St	Gadsden	L	8-18-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Diplectrona modesta	Ochlockonee R	Mule Ck	Liberty	L	7-7-1992	FDEP-Tallahassee	30 30 41	84 49 42	Hwy 12
Diplectrona modesta	Ochlockonee R	Turkey Ck	Gadsden	L	8-21-1994	FAMU	30 31 15	84 34 53	headwaters, 5 km S Quincy
Diplectrona modesta	St. Marks R	Burnt Mill Ck	Jefferson	L	7-31-1991	FAMU	30 25 31	84 01 11	CR-59
Diplectrona modesta	St. Marks R	Burnt Mill Ck	Jefferson	L	2-4-1993	FAMU	30 25 31	84 01 11	CR-59
Diplectrona modesta	St. Marks R	Burnt Mill Ck	Jefferson	L	4-1-1993	FAMU	30 25 31	84 01 11	CR-59
Diplectrona modesta	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Diplectrona modesta	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Diplectrona modesta	unknown	North Pretty Branch	Escambia	L	12-10-1979	FDEP-Pensacola	30 41 47	87 18 28	S of Molino
Hydropsyche alvata	Chipola R	unknown	Jackson	A	4-18-1963	FAMU	30 48 51	85 14 00	Florida Caverns State Park
Hydropsyche betteni						(Harris & Lawrence, 1978)			[no specific locality mentioned]
Hydropsyche decalda	Aucilla R	Aucilla R	Jefferson	L	8-28-1991	FAMU	30 29 34	83 43 52	US Hwy 90
Hydropsyche decalda	Aucilla R	Aucilla R	Jefferson	L	8-26-1992	FAMU	30 29 34	83 43 52	US Hwy 90
Hydropsyche decalda	Aucilla R	Aucilla R	Jefferson	L	10-28-1992	FAMU	30 29 34	83 43 52	US Hwy 90
Hydropsyche decalda	Aucilla R	Aucilla R	Jefferson	L	12-16-1992	FAMU	30 29 34	83 43 52	US Hwy 90
Hydropsyche decalda	Aucilla R	Aucilla R	Jefferson	L	2-25-1993	FAMU	30 29 34	83 43 52	US Hwy 90
Hydropsyche decalda	Aucilla R	Aucilla R	Jefferson	L	4-28-1993	FAMU	30 29 34	83 43 52	US Hwy 90
Hydropsyche decalda	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydropsyche decalda	Kissimmee R	Carter Ck	Highlands	L	7-9-1979	FDEP-Punta Gorda	27 31 57	81 23 14	Arbuckle Ck Road
Hydropsyche decalda	Ochlockonee R	Mule Ck	Liberty	L	7-7-1992	FDEP-Tallahassee	30 30 41	84 49 42	Hwy 12
Hydropsyche decalda	Peace R	drainage ditch	Highlands	L	2-18-1987	FDEP-Punta Gorda	27 24 20	81 32 00	Sun & Lake Estates
Hydropsyche decalda	St. Andrews Bay	Bear Ck	Bay	L	10-23-1990	FDEP-Tallahassee	30 19 13	85 27 22	US Hwy 231

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Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Hydropsyche decalda	St. Marks R	Black Ck	Leon	L	6-13-1990	FDEP-Tallahassee	30 30 04	84 04 51	Baum Road
Hydropsyche elisoma	Blackwater R	Blackwater R	Okaloosa	A	3-23-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Hydropsyche elisoma	Blackwater R	Blackwater R	Okaloosa	A	4-12-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Hydropsyche elisoma	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydropsyche elisoma	Choctawhatchee Bay	Rocky Ck	Walton	L		(Scheiring, 1985)	30 39 00	86 20 00	Eglin Air Force Base
Hydropsyche elisoma	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Hydropsyche elisoma	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Hydropsyche incommoda	Chipola R	unknown	Jackson	A	4-13-1960	FAMU	30 48 51	85 14 00	Florida Caverns State Park
Hydropsyche incommoda	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydropsyche incommoda	Escambia R	Escambia R	Escambia	L	11-21-1978	FDEP-Pensacola	30 58 01	87 13 56	Hwy 4
Hydropsyche incommoda	Peace R	unknown	De Soto	A	4-29-1954	FAMU	27 12 58	81 51 30	Arcadia
Hydropsyche incommoda	Santa Fe R	Santa Fe R	Alachua	A	5-4-1958	FAMU	29 50 00	82 36 00	near city of High Springs
Hydropsyche incommoda	St. Marys R	St. Marys R	Nassau	L	8-27-1979	FDEP-Jacksonville	30 44 28	81 41 20	US Hwy 17
Hydropsyche incommoda	Suwannee R, upper	Suwannee R	Suwannee	A	5-6-1977	FAMU	30 24 01	83 09 30	Suwannee River State Park
Hydropsyche incommoda	Withlacoochee R, S.	Withlacoochee R	Pasco	A	4-7-1955	FAMU	28 19 00	82 04 00	none
Hydropsyche incommoda	Yellow R	Yellow R	Okaloosa	L	2-16-1978	FDEP-Pensacola	30 55 30	86 33 34	SR-189
Hydropsyche incommoda	unknown	unknown	Alachua	A	5-8-1958	FAMU	29 37 07	82 19 31	none
Hydropsyche incommoda	unknown	unknown	Alachua	A	6-23-1959	FAMU	29 37 07	82 19 31	none
Hydropsyche incommoda	unknown	unknown	Jefferson	A	4-8-1958	FAMU	30 32 43	83 52 13	Monticello
Hydropsyche mississippiensis	Apalachicola R	Flat Ck	Gadsden	L	8-13-1992	FDEP-Tallahassee	30 37 43	84 50 06	Hwy 269
Hydropsyche mississippiensis	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW of Havana
Hydropsyche mississippiensis	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	SR-12, 5 mi SW of Havana
Hydropsyche orris	Apalachicola R	unknown	Liberty	A	5-15-1964	FAMU	30 34 09	84 56 51	Torreya State Park
Hydropsyche orris	Apalachicola R	unknown	Liberty	A	7-19-1980	FAMU	30 34 09	84 56 51	Torreya State Park
Hydropsyche phalerata	unknown					(Flint et al., 1979)			[no specific locality mentioned]
Hydropsyche phalerata	unknown					(Nimmo, 1987)			[no specific locality mentioned]
Hydropsyche rossi	Chipola R	Blue Springs Ck	Jackson	A	6-5-1940	(Flint et al., 1979)	30 45 13	85 11 36	3 mi E Marianna
Hydropsyche rossi	Oklawaha R	unknown	Lake	A	3-23-1936	(Flint et al., 1979)	28 48 15	81 43 33	Tavares
Hydropsyche rossi	Santa Fe R	Santa Fe R	Columbia	A	5-31-1966	(Flint et al., 1979)	29 55 00	82 35 00	O'Leno State Park
Hydropsyche rossi	Santa Fe R	Santa Fe R	Gilchrist	A	5-6-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Hydropsyche rossi	St. Johns R, upper	Juniper Springs	Marion	A	4-28-1970	(Flint et al., 1979)	29 10 43	81 42 29	Juniper Springs
Hydropsyche rossi	Suwannee R, lower	Suwannee R	Suwannee	A	9-26-1976	FAMU	30 04 18	83 05 02	7.7 mi W O'Brien on SR-349
Hydropsyche rossi	Suwannee R, upper	Suwannee R	Hamilton	A	3-29-1977	FAMU	30 19 54	82 46 01	Stephen Foster Memorial
Hydropsyche rossi	Yellow R	Yellow R	Okaloosa	L	2-16-1978	FDEP-Pensacola	30 55 30	86 33 34	SR-189
Hydropsyche rossi	unknown	unknown	Alachua	A	7-6-1965	FAMU	29 37 07	82 19 31	none
Hydropsyche rossi	unknown	unknown	Alachua	A	4-20-1967	(Flint et al., 1979)	29 37 07	82 19 31	none

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Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Hydropsyche rossi	unknown	unknown	Alachua	A	5-28-1968	FAMU	29 37 07	82 19 31	none
Hydropsyche rossi	unknown	unknown	Alachua	A	9-23-1972	FAMU	29 37 07	82 19 31	none
Macrostemum carolina	Apalachicola R	Apalachicola R	unknown	L		(Wallace & Sherberger, 1974)			none
Macrostemum carolina	Apalachicola R	Mosquito Ck	Gadsden	L	7-28-1978	FAMU	30 39 51	84 44 00	none
Macrostemum carolina	Apalachicola R	unknown	Calhoun	A	5-27-1954	FAMU	30 26 36	85 02 43	Blountstown
Macrostemum carolina	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Macrostemum carolina	Escambia R	Escambia R	Escambia	L	10-24-1952	FAMU			none
Macrostemum carolina	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159
Macrostemum carolina	Ochlockonee R	Turkey Ck	Gadsden	A	8-21-1994	FAMU	30 31 15	84 34 53	headwaters, 5 km S Quincy
Macrostemum carolina	Ochlockonee R	unknown	Gadsden	A	5-15-1956	FAMU	30 35 15	84 35 00	Quincy, N.F.E.S.
Macrostemum carolina	Ochlockonee R	unknown	Gadsden	A	5-6-1958	FAMU	30 35 15	84 35 00	Quincy
Macrostemum carolina	Oklawaha R	unknown	Alachua	A	8-23-1972	FAMU	29 39 07	82 19 31	Gainesville, Doyle Conner Bldg.
Macrostemum carolina	Oklawaha R	unknown	Alachua	A	9-7-1972	FAMU	29 39 07	82 19 31	Gainesville
Macrostemum carolina	Perdido Bay	Bayou Marcus Ck	Escambia	L	4-1-1953	FAMU	30 26 02	87 19 25	none
Macrostemum carolina	Perdido Bay	Bayou Marcus Ck	Escambia	L	9-18-1990	FSU	30 26 02	87 19 25	none
Macrostemum carolina	Santa Fe R	Santa Fe R	Columbia	L	7-10-1952	FAMU	29 55 00	82 35 00	Oleno
Macrostemum carolina	St. Andrews Bay	Bear Ck	Bay	L	8-27-1991	FDEP-Tallahassee	30 19 17	85 29 20	Camp Flower Rd
Macrostemum carolina	Suwannee R	Suwannee R	Suwannee	L	9-23-1952	FAMU			none
Macrostemum carolina	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	Rt. 41
Macrostemum carolina	Suwannee R, upper	Suwannee R	Hamilton	L	3-10-1953	FAMU	30 21 00	82 41 10	NE White Springs
Macrostemum carolina	Suwannee R, upper	Suwannee R	Hamilton	L	1-29-1975	FDEP-Jacksonville	30 19 41	82 45 35	US Hwy 136, White Springs
Macrostemum carolina	Suwannee R, upper	Suwannee R	Hamilton	L	6-26-1991	FAMU	30 33 54	82 43 27	7.5 km N of SR-6
Macrostemum carolina	Suwannee R, upper	Suwannee R	Hamilton	L	6-24-1992	FAMU	30 33 54	82 43 27	7.5 km N of SR-6
Macrostemum carolina	Suwannee R, upper	Suwannee R	Suwannee	L	6-24-1992	FAMU	30 23 35	82 55 57	0.5 km E of US Hwy 129
Macrostemum carolina	Suwannee R, upper	Suwannee R	Suwannee	L	10-28-1992	FAMU	30 23 35	82 55 57	0.5 km E of US Hwy 129
Macrostemum carolina	Waccasassa R	Waccasassa R	Levy	L	6-4-1961	FAMU	29 17 00	82 44 00	none
Macrostemum carolina	Withlacoochee R, N.	Withlacoochee R	Madison	L	7-1-1952	FAMU			Beck Station 9
Macrostemum carolina	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Macrostemum carolina	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Macrostemum carolina	Yellow R	Yellow R	Okaloosa	L	2-16-1978	FDEP-Pensacola	30 55 30	86 33 34	SR-189
Macrostemum carolina	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Macrostemum carolina	unknown	unknown	Baker	A	6-2-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line nr Rt 90
Macrostemum carolina	unknown	unknown	Baker	A	6-2-1977	FAMU	30 22 58	82 19 54	Osceola Nat. For., E forest tower
Potamyia flava	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Potamyia flava	unknown	unknown	Liberty			(Gordon, 1984)			[no specific locality mentioned]

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA HYDROPTILIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Hydroptila acadia									[no specific localities]
Hydroptila armata									[no specific localities]
Hydroptila berneri	Santa Fe R	Santa Fe R	Alachua	A		(Blickle, 1962)	29 49 37	82 35 48	High Springs
Hydroptila berneri	Santa Fe R	Santa Fe R	Alachua	A	3-4-1939	(Ross, 1941)			none
Hydroptila circangula						(Harris et al., 1991)			panhandle Florida
Hydroptila hamata	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydroptila latosa	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	3-15-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	3-29-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	4-19-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	4-21-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	4-23-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	5-3-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	5-21-1957	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Apalachicola R	unknown	Gadsden	A	6-13-1958	(Blickle, 1961)	30 42 19	84 50 35	Chattahoochee
Hydroptila llogonae	Hillsborough R	unknown	Hillsborough	A	12-27-1957	(Blickle, 1961)	28 02 09	82 23 23	Temple Terrace
Hydroptila llogonae	Hillsborough R	unknown	Hillsborough	A	4-11-1958	(Blickle, 1961)	28 02 09	82 23 23	Temple Terrace
Hydroptila llogonae	Hillsborough R	unknown	Hillsborough	A	4-29-1958	(Blickle, 1961)	28 02 09	82 23 23	Temple Terrace
Hydroptila llogonae	Hillsborough R	unknown	Hillsborough	A	6-13-1958	(Blickle, 1961)	28 02 09	82 23 23	Temple Terrace
Hydroptila llogonae	Peace R	unknown	Highlands	A	9-13-1957	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	9-15-1957	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	9-25-1957	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	10-15-1957	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	10-25-1957	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	3-22-1958	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	4-25-1958	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	5-9-1958	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	Peace R	unknown	Highlands	A	6-13-1958	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila llogonae	unknown	unknown	unknown	A	5-9-1958	(Blickle, 1961)			Goose Prairie
Hydroptila maculata	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Hydroptila maculata	Indian River South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere

TRICHOPTERA DATABASE: FLORIDA HYDROPTILIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Hydroptila maculata	Southeast FL Coast	unknown	Dade	A		(Blickle, 1962)	25 32 18	80 24 32	Princeton
Hydroptila maculata	Southeast FL Coast	unknown	Martin	A		(Blickle, 1962)	26 59 16	80 36 18	Port Mayaca
Hydroptila molsonae	Peace R	unknown	Highlands	A	9-25-1958	(Blickle, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila morsei	Kissimmee R	unknown	Highlands	A	3-6-1964	(Sykora & Harris, 1994)	27 11 20	81 20 15	Archbold Biological Station
Hydroptila parastrepha	unknown	unknown	unknown	A		(Harris et al., 1991)			common in northern Florida
Hydroptila quinola	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Hydroptila quinola	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydroptila quinola	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Hydroptila quinola	Ochlockonee R	Telogia Ck	Liberty	A		FAMU	30 27 00	84 51 43	C-271 (bridge)
Hydroptila quinola	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Hydroptila quinola	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Hydroptila remita	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Hydroptila remita	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Hydroptila remita	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Hydroptila remita	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila remita	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights
Hydroptila wakulla	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Hydroptila wakulla	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Hydroptila wakulla	Santa Fe R	unknown	Alachua	A		(Blickle, 1962)	29 49 37	82 35 48	High Springs
Hydroptila wakulla	St. Marks R	Wakulla Springs	Wakulla	A		(Blickle, 1962)	30 14 01	84 18 19	Wakulla Springs
Hydroptila wakulla	St. Marks R	Wakulla Springs	Wakulla	A	10-23-1945	(Denning, 1947)	30 14 01	84 18 19	Wakulla Springs
Hydroptila waubesiana	Apalachicola R	Apalachicola R	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Hydroptila waubesiana	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Hydroptila waubesiana	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Hydroptila waubesiana	Hillsborough R	unknown	Polk	A		(Blickle, 1962)	28 02 39	81 57 24	Lakeland
Hydroptila waubesiana	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Hydroptila waubesiana	Yellow R	unknown	Okaloosa	A		(Blickle, 1962)	30 57 58	86 27 35	Laurel Hill
Hydroptila waubesiana	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Hydroptila waubesiana	unknown	unknown	unknown	A		(Blickle, 1962)			Goose Prairie
Mayatrichia ayama	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Mayatrichia ayama	Peace R	Peace R	Desoto	L	2-4-1980	FDEP-Punta Gorda	27 14 00	81 53 00	Peace R above Rt. 72

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Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Mayatrichia ayama	Suwannee R, upper	Suwannee R	Hamilton	L	9-6-1974	FDEP-Jacksonville	30 19 41	82 45 35	US Hwy 136, White Springs
Mayatrichia ayama	Suwannee R, upper	Suwannee R	Suwannee	L	10-28-1992	FAMU	30 24 13	83 09 30	Suwannee River State Park
Mayatrichia ayama	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	8-28-1991	FAMU	30 30 13	83 14 32	3 km N SR-6
Mayatrichia ayama	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Mayatrichia ayama	unknown	unknown	Madison	A		(Blickle, 1962)	30 28 10	83 24 47	Madison
Neotrichia alabamensis	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW Havana
Neotrichia alabamensis	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	10 mi S Quincy, C-267
Neotrichia armitagei	Choctawhatchee Bay	Rogue Ck	Okaloosa	A	8-14-1985	(Harris, 1991)	30 33 22	86 33 44	5.3 km NW Niceville, Base Rd. 233
Neotrichia armitagei	Choctawhatchee Bay	unnamed trib.Turkey Ck	Okaloosa	A	8-14-1985	(Harris, 1991)	30 35 00	86 35 00	8 km NW Niceville, Base Rd. 603
Neotrichia armitagei	Yellow R	Turkey Gobble Ck	Okaloosa	A	8-15-1985	(Harris, 1991)	30 38 00	86 38 00	11.2 km NW Niceville, Base Rd. 211
Neotrichia minutisimella	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Neotrichia minutisimella	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Neotrichia okopa	unknown	unknown	unknown	A		(Blickle, 1979)			[listed as occurring in FL]
Neotrichia vibrans	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Neotrichia vibrans	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Neotrichia vibrans	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW Havana
Neotrichia vibrans	Southeast FL Coast	unknown	Dade	A	5-10-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Neotrichia vibrans	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Neotrichia vibrans	unknown	unknown	Madison	A		(Blickle, 1962)	30 28 10	83 24 47	Madison
Ochrotrichia okaloosa	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	8-14-1985	(Harris & Armitage, 1987)	30 33 43	86 32 11	5.0 mi NW Niceville, Base Rd. 233
Ochrotrichia provosti	Hillsborough R	unknown	Hillsborough	A	7-12-1957	(Blickle, 1961)	28 02 09	82 23 23	Temple Terrace
Ochrotrichia tarsalis	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Orthotrichia aegerfasciella	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Orthotrichia aegerfasciella	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Orthotrichia aegerfasciella	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Orthotrichia aegerfasciella	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Orthotrichia aegerfasciella	Hillsborough R	unknown	Polk	A		(Blickle, 1962)	28 02 39	81 57 24	Lakeland
Orthotrichia aegerfasciella	Indian River, South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere
Orthotrichia aegerfasciella	Indian River, South	unknown	St. Lucie	A		(Blickle, 1962)	27 31 15	80 21 11	Indrio
Orthotrichia aegerfasciella	Oklawaha R	unknown	Lake	A		(Blickle, 1962)	28 48 42	81 52 41	Leesburg
Orthotrichia aegerfasciella	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park

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Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Dade	A	5-10-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Dade	A	10-2-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Dade	A	10-21-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Dade	A	11-15-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Dade	A	2-5-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Dade	A	3-15-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia aegerfasciella	Southeast FL Coast	unknown	Martin	A		(Blickle, 1962)	26 59 16	80 36 18	Port Mayaca
Orthotrichia aegerfasciella	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights
Orthotrichia aegerfasciella	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Orthotrichia aegerfasciella	unknown	unknown	unknown	A		(Blickle, 1962)			Goose Prairie
Orthotrichia baldufi	Apalachicola R	unknown	Gadsden	A	6-19-1957	(Kingsolver & Ross, 1961)	30 42 19	84 50 35	Chattahoochee
Orthotrichia cristata	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Orthotrichia cristata	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Orthotrichia cristata	Florida Keys	unknown	Monroe	A		(Blickle, 1962)	24 41 00	81 22 00	Big Pine Key
Orthotrichia cristata	Indian R, South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere
Orthotrichia cristata	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW Havana
Orthotrichia cristata	Southeast FL Coast	unknown	Dade	A	4-10-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Orthotrichia curta	Hillsborough R	unknown	Hillsborough	A	6-13-1958	(Kingsolver & Ross, 1961)	28 02 09	82 23 23	Temple Terrace
Orthotrichia curta	Peace R	unknown	Highlands	A		(Kingsolver & Ross, 1961)	27 28 23	81 31 41	Highlands Hammock State Park
Orthotrichia curta	unknown	unknown	unknown	A		(Kingsolver & Ross, 1961)			Goose Prairie
Orthotrichia dentata	Hillsborough R	unknown	Hillsborough	A	4-23-1957	(Kingsolver & Ross, 1961)	28 02 09	82 23 23	Temple Terrace
Orthotrichia dentata	Hillsborough R	unknown	Hillsborough	A	4-1-1958	(Kingsolver & Ross, 1961)	28 02 09	82 23 23	Temple Terrace
Orthotrichia instabilis	St. Johns R, upper	unknown	Orange	A	5-16-1940	(Denning, 1948a)	28 36 00	81 20 21	Winter Park
Oxyethira abacatia	Apalachicola R	Apalachicola R	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Oxyethira abacatia	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira abacatia	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights
Oxyethira elerobi	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oxyethira elerobi	Yellow R	unknown	Okaloosa	A	4-30-1957	(Blickle, 1961)	30 57 58	86 27 35	Laurel Hill
Oxyethira florida	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Oxyethira florida	Southeast FL Coast	unknown	Dade	A	10-1-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira florida	Southeast FL Coast	unknown	Dade	A	10-21-1944	(Denning, 1947)	25 46 28	80 11 38	Miami

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Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Oxyethira florida	Southeast FL Coast	unknown	Dade	A	11-23-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira florida	Southeast FL Coast	unknown	Dade	A	2-1-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira florida	Southeast FL Coast	unknown	Dade	A	2-5-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira florida	Southeast FL Coast	unknown	Dade	A	3-8-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira glasa	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira glasa	Caloosahatchee R	unknown	Lee	A		(Blickle, 1962)	26 38 26	81 52 21	Fort Myers
Oxyethira glasa	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oxyethira glasa	Florida Keys	unknown	Monroe	A		(Blickle, 1962)	24 41 00	81 22 00	Big Pine Key
Oxyethira glasa	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Oxyethira glasa	Hillsborough R	unknown	Polk	A		(Blickle, 1962)	28 02 39	81 57 24	Lakeland
Oxyethira glasa	Indian R South	unknown	Indian River	A		(Blickle, 1962)	27 38 19	80 23 50	Vero Beach
Oxyethira glasa	Indian River, South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere
Oxyethira glasa	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Oxyethira glasa	Peace R	unknown	Polk	A		(Blickle, 1962)	27 54 03	81 35 04	Lake Wales
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	2-15-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	2-26-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	11-23-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	12-4-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	12-14-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	12-20-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	2-5-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Dade	A	3-8-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira glasa	Southeast FL Coast	unknown	Martin	A		(Blickle, 1962)	26 59 16	80 36 18	Port Mayaca
Oxyethira glasa	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights
Oxyethira glasa	Withlacoochee R, S.	unknown	Citrus	A		(Blickle, 1962)	28 50 09	82 19 37	Inverness
Oxyethira glasa	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Oxyethira glasa	unknown	unknown	unknown	A		(Blickle, 1962)			Goose Prairie
Oxyethira janella	Aucilla R	Aucilla R	Jefferson	A	10-14-1993	FAMU	30 16 25	83 51 25	SR-257
Oxyethira janella	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oxyethira janella	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW of Havana

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Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Oxyethira janella	St. Johns R, upper	unknown	Orange	A	5-16-1940	(Denning, 1948a)	28 36 00	81 20 21	Winter Park
Oxyethira kelleyi	Choctawhatchee Bay	Rogue Ck	Okaloosa	A	8-14-1985	(Harris & Armitage, 1987)	30 33 22	86 33 44	3.3 mi NW Niceville, Base Rd 233
Oxyethira kelleyi	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	8-14-1985	(Harris & Armitage, 1987)	30 33 43	86 32 11	5.0 mi NW Niceville, Base Rd 233
Oxyethira kelleyi	Choctawhatchee Bay	unnamed trib. Turkey Ck	Okaloosa	A	8-14-1985	(Harris & Armitage, 1987)	30 35 00	86 35 00	4.6 mi NW Niceville, Base Rd 619
Oxyethira kingi	Southeast FL Coast	unknown	Dade	A	12-21-1964	(Holzenthal & Kelley, 1983)	25 46 28	80 11 38	Plant Inspection Station
Oxyethira lumosa	Apalachicola R	Apalachicola R	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Oxyethira lumosa	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira lumosa	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira lumosa	East Coast, Upper	unknown	Volusia	A		(Blickle, 1962)	29 12 40	81 01 23	Daytona Beach
Oxyethira lumosa	East Coast, Upper	unknown	Volusia	A		(Ross, 1948a)	29 12 40	81 01 23	Daytona Beach
Oxyethira lumosa	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Oxyethira lumosa	Hillsborough R	unknown	Polk	A		(Blickle, 1962)	28 02 39	81 57 24	Lakeland
Oxyethira lumosa	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Oxyethira lumosa	Peace R	unknown	Polk	A		(Blickle, 1962)	27 54 03	81 35 04	Lake Wales
Oxyethira lumosa	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights
Oxyethira lumosa	Withlacoochee R, S.	unknown	Citrus	A		(Blickle, 1962)	28 50 09	82 19 37	Inverness
Oxyethira lumosa	Yellow R	unknown	Okaloosa	A		(Blickle, 1962)	30 57 58	86 27 35	Laurel Hill
Oxyethira lumosa	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Oxyethira lumosa	unknown	unknown	unknown	A		(Blickle, 1962)			Goose Prairie
Oxyethira maya	Apalachicola R	Apalachicola R	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Oxyethira maya	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira maya	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira maya	Indian R, South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere
Oxyethira maya	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Oxyethira novasota	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira novasota	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira novasota	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oxyethira novasota	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159, 3 mi NW of Havana
Oxyethira novasota	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oxyethira pallida	Apalachicola R	Apalachicola R	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Oxyethira pallida	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee

TRICHOPTERA DATABASE: FLORIDA HYDROPTILIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Oxyethira pallida	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira pallida	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Oxyethira pallida	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Oxyethira roberti	Ochlockonee R	unknown	Leon	A	5-29-1973	(Kelley, 1981)	30 39 00	84 13 00	Tall Timbers Research Station
Oxyethira savanniensis	unknown	unknown	unknown	A		(Harris et al., 1991)			none
Oxyethira setosa	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oxyethira sininsigne	St. Johns R, lower	unknown	Clay	A	3-22-1957	(Kelley, 1981)	29 47 09	82 01 55	Keystone Heights
Oxyethira sininsigne	St. Marks R	Dog Lake	Leon	A	4-20-1975	(Kelley, 1981)	30 22 38	84 23 44	4 mi SW of Tallahassee
Oxyethira verna	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira verna	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira verna	Caloosahatchee R	unknown	Lee	A		(Blickle, 1962)	26 38 26	81 52 21	Fort Myers
Oxyethira verna	Caloosahatchee R	unknown	Lee	A		(Blickle, 1962)	26 40 02	81 52 48	North Fort Myers
Oxyethira verna	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Oxyethira verna	Hillsborough R	unknown	Polk	A		(Blickle, 1962)	28 02 39	81 57 24	Lakeland
Oxyethira verna	Indian R, South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere
Oxyethira verna	Indian R, South	unknown	St. Lucie	A		(Blickle, 1962)	27 31 15	80 21 11	Indrio
Oxyethira verna	Oklawaha R	unknown	Lake	A		(Blickle, 1962)	28 48 42	81 52 41	Leesberg
Oxyethira verna	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	2-15-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	2-23-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	4-10-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	10-21-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	11-23-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	12-4-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	12-14-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	12-20-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	2-5-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	3-23-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Dade	A	10-2-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira verna	Southeast FL Coast	unknown	Martin	A		(Blickle, 1962)	26 59 16	80 36 18	Port Mayaca
Oxyethira verna	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights

TRICHOPTERA DATABASE: FLORIDA HYDROPTILIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Oxyethira verna	Withlacoochee R, S.	unknown	Citrus	A		(Blickle, 1962)	28 50 09	82 19 37	Inverness
Oxyethira verna	unknown	unknown	Madison	A		(Blickle, 1962)	30 28 10	83 24 47	Madison
Oxyethira verna	unknown	unknown	unknown	A		(Blickle, 1962)			Goose Prairie
Oxyethira zeronia	Apalachicola R	Apalachicola R	Gadsden	A		(Blickle, 1962)	30 42 28	84 51 38	Jim Woodruff Dam
Oxyethira zeronia	Apalachicola R	unknown	Gadsden	A		(Blickle, 1962)	30 42 19	84 50 35	Chattahoochee
Oxyethira zeronia	Apalachicola R	unknown	Jackson	A		(Blickle, 1962)	30 42 28	84 55 28	Sneads
Oxyethira zeronia	Caloosahatchee R	unknown	Lee	A		(Blickle, 1962)	26 38 26	81 52 21	Fort Myers
Oxyethira zeronia	Caloosahatchee R	unknown	Lee	A		(Blickle, 1962)	26 40 02	81 52 48	North Fort Myers
Oxyethira zeronia	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oxyethira zeronia	Florida Keys	unknown	Monroe	A		(Blickle, 1962)	24 41 00	81 22 00	Big Pine Key
Oxyethira zeronia	Hillsborough R	unknown	Hillsborough	A		(Blickle, 1962)	28 02 09	82 23 23	Temple Terrace
Oxyethira zeronia	Indian R, South	unknown	Indian River	A		(Blickle, 1962)	27 46 05	80 36 05	Fellsmere
Oxyethira zeronia	Peace R	unknown	Highlands	A		(Blickle, 1962)	27 28 23	81 31 41	Highlands Hammock State Park
Oxyethira zeronia	Southeast FL Coast	unknown	Dade	A		(Blickle, 1962)	25 46 28	80 11 38	Miami
Oxyethira zeronia	Southeast FL Coast	unknown	Dade	A	5-10-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira zeronia	Southeast FL Coast	unknown	Dade	A	11-15-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira zeronia	Southeast FL Coast	unknown	Dade	A	11-30-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira zeronia	Southeast FL Coast	unknown	Dade	A	12-20-1944	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira zeronia	Southeast FL Coast	unknown	Dade	A	3-15-1945	(Denning, 1947)	25 46 28	80 11 38	Miami
Oxyethira zeronia	St. Johns R, lower	unknown	Clay	A		(Blickle, 1962)	29 47 09	82 01 55	Keystone Heights
Oxyethira zeronia	unknown	unknown	Jackson	A		(Blickle, 1962)			River Road
Oxyethira zeronia	unknown	unknown	unknown	A		(Blickle, 1962)			Goose Prairie

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA LEPIDOSTOMATIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Lepidostoma griseum	Apalachicola R	Beaver Dam Ck	Liberty	A	10-26-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Lepidostoma griseum	Apalachicola R	Kelley Branch	Liberty	A	10-26-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Lepidostoma griseum	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Lepidostoma latipenne	Apalachicola R	Beaver Dam Ck	Liberty	A	12-7-1994	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Lepidostoma latipenne	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Lepidostoma latipenne	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Lepidostoma latipenne	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Lepidostoma morsei	Choctawhatchee Bay	Little Alaqua Ck	Walton	A	10-18-1970	(Weaver, 1988)	30 33 00	86 11 00	none
Lepidostoma sp. (nr. serratum)	Ochlockonee R	FAMU Farm Stream	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lepidostoma sp. (nr. serratum)	Ochlockonee R	Turkey Ck headwaters	Gadsden	A	10-14-1994	FAMU	30 31 15	84 34 53	4 mi S Quincy off C-267A

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA LEPTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Ceraclea cancellata	Apalachicola R	unknown	Liberty	A	5-18-1966	FAMU	30 34 09	84 56 51	Torreya State Park
Ceraclea cancellata	Apalachicola R	unknown	Liberty	A	5-8-1968	FAMU	30 34 09	84 56 51	Torreya State Park
Ceraclea cancellata	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12 @ bridge, 5 mi SW Havana
Ceraclea cancellata	Ochlockonee R	Telogia Ck	Liberty	A	7-2-1986	FAMU	30 25 36	84 55 39	2.5 mi E Bristol, S-20(bridge)
Ceraclea cancellata	Ochlockonee R	Telogia Ck	Liberty	A	6-20-1990	FAMU	30 27 00	84 51 43	C-271 @ 10 km NW Hosford
Ceraclea cancellata	Oklawaha R	Red Water Lake	Putnam	A	4-23-1966	FAMU	29 34 00	82 01 00	Weems property
Ceraclea cancellata	Santa Fe R	Santa Fe R	Gilchrist	A	5-7-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Ceraclea cancellata	Santa Fe R	unknown	Alachua	A	3-30-1954	FAMU	29 47 47	82 29 42	Alachua
Ceraclea diluta	Ochlockonee R	Telogia Ck	Liberty	A	4-29-1987	FAMU	30 25 36	84 55 39	S-20 @ br. 2.5 mi E of Bristol
Ceraclea diluta	Yellow R	Shoal R	Okaloosa	L	2-22-1978	FDEP-Pensacola	30 47 26	86 25 07	SR-393
Ceraclea flava	Ochlockonee R	Camp Ck	Gadsden	A	5-20-1987	FAMU	30 30 50	84 39 16	C-274, 13 km SW Quincy
Ceraclea floridana	Southeast FL Coast	Biscayne Bay	Dade	A		(Morse, 1975)	25 46 28	80 11 38	Biscayne Bay
Ceraclea maculata	Apalachicola R	Apalachicola R	Liberty	L	7-27-1976	FDEP-Pensacola	30 25 52	85 10 19	Bristol Hwy. 20
Ceraclea maculata	Chipola R	Chipola R	Calhoun	L	9-2-1976	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Ceraclea maculata	Chipola R	unknown	Jackson	A	4-18-1963	FAMU	30 48 51	85 14 00	Florida Caverns State Park
Ceraclea maculata	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Ceraclea maculata	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	3 mi NW Havana, C-159
Ceraclea maculata	Ochlockonee R	Little R	Gadsden	A	6-10-1986	FAMU	30 30 45	84 31 24	6.5 mi SE Quincy, C-268
Ceraclea maculata	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12 @ bridge, 5 mi SW Havana
Ceraclea maculata	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	10 mi S Quincy, C-267
Ceraclea maculata	Ochlockonee R	Telogia Ck	Liberty	A	7-2-1986	FAMU	30 25 36	84 55 39	2.5 mi E Bristol @ S-20 bridge
Ceraclea maculata	Ochlockonee R	Willacoochee Ck	Gadsden	A	4-26-1990	FAMU	30 40 15	84 32 34	S-65 & C-65A @ 10 km N Quincy
Ceraclea maculata	Oklawaha R	unknown	Alachua	A	9-23-1972	FAMU	29 39 07	82 19 31	Gainesville
Ceraclea maculata	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	Rt. 41
Ceraclea maculata	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Ceraclea maculata	unknown	Ocean Pond	Baker	A	5-16-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Ceraclea maculata	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Ceraclea nepha	Chipola R	unknown	Jackson	A	4-13-1960	FAMU	30 48 51	85 14 00	Florida Caverns State Park
Ceraclea nepha	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Ceraclea ophioderus	Apalachicola R	unknown	Liberty	A	5-18-1966	FAMU	30 34 09	84 56 51	Torreya State Park
Ceraclea ophioderus	Apalachicola R	unknown	Liberty	A	5-20-1966	FAMU	30 34 09	84 56 51	Torreya State Park
Ceraclea ophioderus	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12 @ bridge, 5 mi SW Havana
Ceraclea protonepha	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	5 km N Bristol
Ceraclea protonepha	Apalachicola R	unknown	Liberty	A	4-17-1963	FAMU	30 34 09	84 56 51	Torreya State Park

TRICHOPTERA DATABASE: FLORIDA LEPTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Ceraclea protonepha	Apalachicola R	unknown	Liberty	A	5-8-1968	FAMU	30 34 09	84 56 51	Torreya State Park
Ceraclea protonepha	Blackwater R	Blackwater R	Okaloosa	A	4-24-1970	(Morse, 1975)	30 43 28	86 47 30	2.5 mi W Holt
Ceraclea protonepha	Blackwater R	Blackwater R	Okaloosa	A	4-25-1970	(Morse, 1975)	30 52 55	86 43 52	4.5 mi NW Cannon Town
Ceraclea protonepha	Blackwater R	Blackwater R	Okaloosa	A	4-12-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Ceraclea protonepha	Blackwater R	Blackwater R	Okaloosa	A	4-13-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Ceraclea protonepha	Chipola R	unknown	Jackson	A	4-13-1960	FAMU	30 48 51	85 14 00	Florida Caverns State Park
Ceraclea protonepha	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Ceraclea protonepha	Suwannee R, upper	Suwannee R	Hamilton	A	3-29-1977	FAMU	30 19 54	82 46 01	Stephen Foster Memorial
Ceraclea protonepha	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Ceraclea protonepha	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Ceraclea resurgens	Ochlockonee R	Telogia Ck	Liberty	A	3-4-1987	FAMU	30 25 36	84 55 39	S-20 (bridge)
Ceraclea slossonae	Escambia R	Escambia R	Escambia	A	9-14-1976	FDEP-Pensacola	30 58 01	87 13 56	Hwy. 4
Ceraclea spongillovorax	Kissimmee R	Lake Annie	Highlands	L		FDEP-Punta Gorda	28 00 00	81 36 00	none
Ceraclea spongillovorax	Kissimmee R	Lake Josephine	Highlands	L	7-25-1985	FDEP-Punta Gorda	27 24 00	81 25 00	none
Ceraclea spongillovorax	Kissimmee R	Lake Viola	Highlands	L		FDEP-Punta Gorda	27 36 48	81 29 44	none
Ceraclea spongillovorax	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Tower Rd. N Tallahassee
Ceraclea tarsipunctata	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	5 km N Bristol
Ceraclea tarsipunctata	Chipola R	unknown	Jackson	A	4-13-1960	FAMU	30 48 51	85 14 00	Florida Caverns
Ceraclea tarsipunctata	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Ceraclea tarsipunctata	Ochlockonee R	Camp Ck	Gadsden	A	5-20-1987	FAMU	30 30 50	84 39 16	C-274, 13 km SW Quincy
Ceraclea tarsipunctata	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Tower Rd. N Tallahassee
Ceraclea tarsipunctata	Ochlockonee R	Willacoochee Ck	Gadsden	A	4-26-1990	FAMU	30 40 15	84 32 34	S-65 & C-65A @ 10 km N Quincy
Ceraclea transversa	Blackwater R	Blackwater R	Okaloosa	A	4-12-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Ceraclea transversa	Blackwater R	Blackwater R	Okaloosa	A	4-13-1973	FAMU	30 44 20	86 47 12	FAMU Biological Station
Ceraclea transversa	Chipola R	unknown	Jackson	A	4-13-1960	FAMU	30 48 51	85 14 00	Florida Caverns
Ceraclea transversa	Ochlockonee R	Little R	Gadsden	A	5-13-1987	FAMU	30 35 15	84 29 48	S-12 @ bridge, 5 mi SW Havana
Ceraclea transversa	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Tower Rd. N Tallahassee
Ceraclea transversa	Oklawaha R	unknown	Alachua	A	4-14-1960	FAMU	29 39 07	82 19 31	Gainesville
Ceraclea transversa	unknown	unknown	Hillsborough	A	5-19-1960	FAMU	27 56 52	82 27 31	Tampa
Leptocerus americanus	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Leptocerus americanus	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Leptocerus americanus	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Leptocerus americanus	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Leptocerus americanus	Ochlockonee R	Telogia Ck	Liberty	A	4-28-1987	FAMU	30 25 36	84 55 39	S-20, 2.5 mi E Bristol

TRICHOPTERA DATABASE: FLORIDA LEPTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Leptocerus americanus	Ochlockonee R	Turkey Ck	Gadsden	A	4-24-1994	FAMU	30 31 15	84 34 53	5 km S Quincy, off Hwy. 267A
Leptocerus americanus	Ochlockonee R	Willacoochee Ck	Gadsden	A	4-26-1990	FAMU	30 40 15	84 32 34	none
Leptocerus americanus	Santa Fe R	Lake Rowell	Bradford	L	11-18-1994	FDEP	29 55 41	82 09 12	none
Leptocerus americanus	unknown	unknown	Baker	A	5-16-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., nr Rt. 90
Leptocerus americanus	unknown	unknown	Baker	A	5-16-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Nectopsyche candida	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Nectopsyche candida	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Nectopsyche candida	Ochlockonee R	Camp Ck	Gadsden	A	5-20-1987	FAMU	30 30 50	84 39 16	C-274, 13 km SW Quincy
Nectopsyche candida	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12, 5 mi SW Havana
Nectopsyche candida	Ochlockonee R	Little R	Gadsden	A	5-13-1987	FAMU	30 35 15	84 29 48	S-12, 5 mi SW Havana
Nectopsyche candida	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	C-267, 10 mi S Quincy
Nectopsyche candida	Ochlockonee R	Telogia Ck	Liberty	A	7-2-1986	FAMU	30 25 36	84 55 39	S-20, 2.5 mi E Bristol
Nectopsyche candida	Ochlockonee R	Willacoochee Ck	Gadsden	A	4-26-1990	FAMU	30 40 15	84 32 34	none
Nectopsyche exquisita	Apalachicola R	unknown	Liberty	A	4-17-1963	FAMU	30 34 09	84 56 51	Torreya State Park
Nectopsyche exquisita	Apalachicola R	unknown	Liberty	A	5-15-1964	FAMU	30 34 09	84 56 51	Torreya State Park
Nectopsyche exquisita	Blackwater R	Blackwater R	Okaloosa	L	1-30-1971	FAMU	30 59 22	86 43 15	1st bridge S Alabama line
Nectopsyche exquisita	Chipola R	unknown	Jackson	A	4-18-1963	FAMU	30 48 51	85 14 00	Florida Caverns State Park
Nectopsyche exquisita	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Nectopsyche exquisita	Kissimmee R	Carter Ck	Highlands	L	2-21-1979	FDEP-Punta Gorda	27 31 57	81 23 14	@ Arbuckle Ck Rd.
Nectopsyche exquisita	Myakka R	Myakka R	Manatee	L	1-26-1984	FDEP-Punta Gorda	27 21 00	82 10 00	Myakka City Park
Nectopsyche exquisita	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Tower Rd. N Tallahassee
Nectopsyche exquisita	Ochlockonee R	unknown	Gadsden	A	4-21-1958	FAMU	30 35 15	84 35 00	Quincy
Nectopsyche exquisita	Oklawaha R	unknown	Alachua	A	4-23-1963	FAMU	29 39 07	82 19 31	Gainesville
Nectopsyche exquisita	Oklawaha R	unknown	Alachua	A	5-28-1968	FAMU	29 39 07	82 19 31	Gainesville
Nectopsyche exquisita	Perdido R	Perdido R	Escambia	L	8-24-1976	FDEP-Pensacola	30 36 14	87 24 15	Hwy 184
Nectopsyche exquisita	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Nectopsyche exquisita	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Nectopsyche paludicola						(Harris et al., 1991)			[no specific locality given]
Nectopsyche pavida	Aucilla R	Aucilla R	Jefferson	A	8-24-1967	FAMU			none
Nectopsyche pavida	Kissimmee R	Lake Damon	Highlands	L	12-31-1985	FDEP-Punta Gorda	27 38 00	81 31 00	none
Nectopsyche pavida	Kissimmee R	Lake Damon	Highlands	L	6-18-1986	FDEP-Punta Gorda	27 38 00	81 31 00	none
Nectopsyche pavida	Myakka R	Myakka R	Manatee	L	7-17-1984	FDEP-Punta Gorda	27 21 00	82 10 00	Myakka City Park
Nectopsyche pavida	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Nectopsyche pavida	Ochlockonee R	Camp Ck	Gadsden	A	5-20-1987	FAMU	30 30 50	84 39 16	C-274, 13 km SW Quincy

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Nectopsyche pavida	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12, 5 mi SW Havana
Nectopsyche pavida	Ochlockonee R	Little R	Gadsden	A	5-13-1987	FAMU	30 35 15	84 29 48	S-12, 5 mi SW Havana
Nectopsyche pavida	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Tower Rd. N Tallahassee
Nectopsyche pavida	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	C-267, 10 mi S Quincy
Nectopsyche pavida	Ochlockonee R	Telogia Ck	Liberty	A	7-2-1986	FAMU	30 25 36	84 55 39	S-20, 2.5 mi E Bristol
Nectopsyche pavida	Ochlockonee R	Telogia Ck	Liberty	A	6-20-1990	FAMU	30 27 00	84 51 43	C-271, 10 km NW Hosford
Nectopsyche pavida	Ochlockonee R	Willacoochee Ck	Gadsden	A	4-26-1990	FAMU	30 40 15	84 32 34	none
Nectopsyche pavida	Ochlockonee R	Willacoochee Ck	Gadsden	L	8-19-1987	FAMU	30 40 15	84 32 34	C-161, 6 mi NE Quincy
Nectopsyche pavida	Oklawaha R	Cabbage Ck	Putnam	L	6-24-1991	FDEP-Tallahassee	29 33 00	81 56 00	none
Nectopsyche pavida	Peace R	Horse Ck	DeSoto	L	2-17-1981	FDEP-Punta Gorda	27 12 00	81 59 17	@ Rt. 72
Nectopsyche pavida	Perdido R	Perdido R	Escambia	L	3-31-1976	FDEP-Pensacola	30 36 14	87 24 15	Hwy 184
Nectopsyche pavida	St. Marks R	Burnt Mill Ck	Jefferson	A	8-14-1980	FAMU	30 25 31	84 01 11	SR-59
Nectopsyche pavida	Yellow R	Narrows Ck	Walton	L	5-24-1977	FDEP-Pensacola	30 47 00	86 12 00	headwaters
Nectopsyche pavida	unknown	unknown	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Nectopsyche pavida	unknown	unknown	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Nectopsyche tavara	Kissimmee R	Lake Istokpoga	Highlands	L	10-9-1984	FDEP-Punta Gorda	27 22 30	81 15 00	boat ramp
Nectopsyche tavara	Kissimmee R	Lake Lotela	Highlands	L	12-19-1985	FDEP-Punta Gorda	27 35 00	81 29 00	none
Nectopsyche tavara	Kissimmee R	Lake Placid	Highlands	A		(Daigle & Haddock, 1981)	27 15 00	81 22 00	none
Nectopsyche tavara	Kissimmee R	Lake Placid	Highlands	L	9-18-1985	FDEP-Punta Gorda	27 15 00	81 22 00	none
Nectopsyche tavara	Lake Okeechobee	Lake Okeechobee	Glades	L	4-23-1987	FDEP	27 03 30	80 58 20	Station 30
Nectopsyche tavara	Oklawaha R	unknown	Lake	A	3-23-1936	(Ross, 1944)	28 48 15	81 43 33	Tavares
Nectopsyche tavara	Santa Fe R	Lake Samson	Bradford	L	11-16-1994	FDEP	29 56 00	82 11 00	none
Nectopsyche tavara	Southeast FL Coast	unknown	Broward	A	7-27-1979	FAMU	26 07 19	80 08 42	Ft. Lauderdale, citrus
Nectopsyche tavara	St. Johns R, upper	unknown	Orange	A		(Ross, 1944)	28 36 00	81 20 21	Winter Park
Nectopsyche tavara	Withlacoochee R, S.	unknown	Citrus	A	11-6-1965	FAMU	28 54 03	82 22 29	Hernando
Nectopsyche tavara	unknown	Lake Conway	unknown	A,L		(Daigle & Haddock, 1981)			none
Nectopsyche tavara	unknown	Lake Fredrica	unknown	A,L		(Daigle & Haddock, 1981)			none
Nectopsyche tavara	unknown	Prairie Lake	Seminole	A		(Daigle & Haddock, 1981)			none
Nectopsyche tavara	unknown	unknown	Levy	A	7-17-1938	(Ross, 1944)	29 30 14	82 52 20	Chiefland
Oecetis avara	Chipola R	Chipola R	Calhoun	L	9-2-1976	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Oecetis cinerascens	Caloosahatchee R	Caloosahatchee R	Glades	L	9-9-1981	FDEP-Punta Gorda			canal at Moore Haven
Oecetis cinerascens	Chipola R	Chipola R	Jackson	L	7-19-1977	FDEP-Pensacola	30 52 16	85 15 15	below SR-162
Oecetis cinerascens	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oecetis cinerascens	Kissimmee R	Arbuckle Ck	Highlands	L	12-12-1977	FDEP-Punta Gorda			below Arbuckle Ck Rd.

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Oecetis cinerascens	Kissimmee R	Kissimmee R	Glades	L	5-26-1987	FDEP-Punta Gorda			at Rt. 78
Oecetis cinerascens	Kissimmee R	Kissimmee R	Osceola	L	4-18-1984	FDEP-Punta Gorda			canal above Lock 65A
Oecetis cinerascens	Kissimmee R	Lake June-in-winter	Highlands	L	2-7-1985	FDEP-Punta Gorda			none
Oecetis cinerascens	Kissimmee R	Lake Lotela	Highlands	L	6-11-1986	FDEP-Punta Gorda			none
Oecetis cinerascens	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Oecetis cinerascens	Ochlockonee R	Lake Jackson	Leon	L	6-7-1977	FAMU	30 32 00	84 19 00	dead end Fuller Rd.
Oecetis cinerascens	Ochlockonee R	Lake Jackson	Leon	L	6-17-1977	FAMU	30 32 00	84 19 00	dead end Fuller Rd.
Oecetis cinerascens	Ochlockonee R	Lake Jackson	Leon	L	6-27-1977	FAMU	30 32 00	84 19 00	dead end Fuller Rd.
Oecetis cinerascens	Ochlockonee R	Lake Jackson	Leon	L	4-6-1978	FAMU	30 32 00	84 19 00	dead end Fuller Rd.
Oecetis cinerascens	Ochlockonee R	Lake Jackson	Leon	L	5-8-1978	FAMU	30 32 00	84 19 00	dead end Fuller Rd.
Oecetis cinerascens	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12 at bridge, 5 mi SW Havana
Oecetis cinerascens	Southeast FL Coast	Canal C-13	Broward	L	8-1-1960	FAMU			New Basin
Oecetis cinerascens	Southeast FL Coast	Canal C-13	Broward	L	1-16-1961	FAMU			New Basin, Sta. Pkwy
Oecetis cinerascens	St. Johns R, lower	Strawberry Ck	Duval	L	7-16-1952	FAMU			Lone Star
Oecetis cinerascens	St. Marks R	Burnt Mill Ck	Jefferson	A	6-15-1981	FAMU	30 25 31	84 01 11	Hwy. 59
Oecetis cinerascens	Suwannee R, upper	Suwannee R	Hamilton	A	6-22-1976	FAMU	30 19 33	82 44 20	Int. Rt. 41
Oecetis cinerascens	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For.
Oecetis daytona			Alachua	A		(Floyd, 1994)			[no specific locality mentioned]
Oecetis daytona			Columbia	A		(Floyd, 1994)			[no specific locality mentioned]
Oecetis daytona			Duval	A		(Floyd, 1994)			[no specific locality mentioned]
Oecetis daytona			Lee	A		(Floyd, 1994)			[no specific locality mentioned]
Oecetis daytona	East Coast, upper	unknown	Volusia	A	7-27-1945	(Ross, 1947)	29 12 40	81 01 23	Daytona Beach
Oecetis ditissa	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Oecetis ditissa	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Oecetis ditissa	Ochlockonee R	FAMU Farm St	Gadsden	A	10-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis ditissa	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis ditissa	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis floridanus	Southeast FL Coast	Biscayne Bay	Dade	A		(Morse, In Press)	25 46 28	80 11 38	none
Oecetis georgia	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Oecetis georgia	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Oecetis georgia	Ochlockonee R	Telogia Ck	Gadsden	L	7-1-1987	FAMU	30 35 40	84 42 36	Rt. 270A (bridge)
Oecetis georgia	Steinhatchee R	Econfina R	Taylor	L	6-19-1991	FAMU	30 15 01	83 42 04	US Hwy 27
Oecetis georgia	Steinhatchee R	Econfina R	Taylor	L	8-21-1991	FAMU	30 15 01	83 42 04	US Hwy 27
Oecetis georgia	Steinhatchee R	Fenholloway R	Taylor	L	5-29-1991	FAMU	30 04 37	83 29 46	@ Fenholloway

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Oecetis georgia	Steinhatchee R	Fenholloway R	Taylor	L	8-31-1991	FAMU	30 04 37	83 29 46	@ Fenholloway
Oecetis georgia	Suwannee R, upper	Suwannee R	Hamilton	L	9-22-1976	FAMU	30 19 33	82 44 20	Int. Rt. 41
Oecetis georgia	Suwannee R, upper	Suwannee R	Hamilton	L	3-29-1977	FAMU	30 19 54	82 46 01	nr. S.F. Mem.
Oecetis georgia	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Oecetis inconspicua	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Oecetis inconspicua	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Oecetis inconspicua	Apalachicola R	small stream	Liberty	A	5-8-1968	FAMU	30 34 09	84 56 51	Torreya St. Park
Oecetis inconspicua	Apalachicola R	unnamed stream	Liberty	A	7-18-1990	FAMU	30 34 09	84 56 51	Torreya St. Park
Oecetis inconspicua	Aucilla R	Aucilla R	Jefferson	L	6-26-1991	FAMU	30 29 34	83 43 52	US 90 bridge
Oecetis inconspicua	Aucilla R	Aucilla R	Jefferson	P	6-19-1991	FAMU	30 29 34	83 43 52	US 90 bridge
Oecetis inconspicua	Escambia R	Escambia R	Escambia	L	3-28-1953	FAMU			E. Basin
Oecetis inconspicua	Everglades-W. Coast	Canal #846	Collier	L	6-8-1960	FAMU			5 mi W US 41
Oecetis inconspicua	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Oecetis inconspicua	Ochlockonee R	Burnt Mill Ck	Jefferson	A	5-19-1990	FAMU	30 25 31	84 01 11	Hwy. 59
Oecetis inconspicua	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis inconspicua	Ochlockonee R	FAMU Farm St	Gadsden	A	10-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis inconspicua	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis inconspicua	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis inconspicua	Ochlockonee R	FAMU Farm St	Gadsden	L	8-2-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis inconspicua	Ochlockonee R	Lake Jackson	Leon	L	6-7-1977	FAMU	30 32 00	84 19 00	dead end Fuller Rd
Oecetis inconspicua	Ochlockonee R	Lake Jackson	Leon	L	6-17-1977	FAMU	30 32 00	84 19 00	dead end Fuller Rd
Oecetis inconspicua	Ochlockonee R	Lake Jackson	Leon	L	6-27-1977	FAMU	30 32 00	84 19 00	dead end Fuller Rd
Oecetis inconspicua	Ochlockonee R	Lake Jackson	Leon	L	7-3-1978	FAMU	30 32 00	84 19 00	dead end Fuller Rd
Oecetis inconspicua	Ochlockonee R	Little R	Gadsden	A	6-10-1986	FAMU	30 30 45	84 31 24	C-268, 6.5 mi SE Quincy
Oecetis inconspicua	Ochlockonee R	Little R	Gadsden	A	6-26-1986	FAMU	30 35 15	84 29 48	S-12, 5 Mi SW Havana
Oecetis inconspicua	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Wildlife Mgnt. Area, N Tallahassee
Oecetis inconspicua	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	CR-267, 10 mi S Quincy
Oecetis inconspicua	Ochlockonee R	Telogia Ck	Liberty	A	4-29-1989	FAMU	30 25 36	84 55 39	S-20 at br. 2.5 mi E Bristol
Oecetis inconspicua	Peace R	Bear St	Polk	L	3-6-1951	FAMU			none
Oecetis inconspicua	Perdido R	Jack's Branch	Escambia	L	10-27-1952	FAMU			none
Oecetis inconspicua	Southeast FL Coast	Canal C-13	Broward	L	8-1-1960	FAMU			New Basin
Oecetis inconspicua	Southeast FL Coast	Plantation Canal	Broward	L	2-9-1960	FAMU			New Basin
Oecetis inconspicua	Southeast FL Coast	S new River Canal	Broward	L	8-10-1959	FAMU			none
Oecetis inconspicua	St. Marks R	St. Marks R	Leon	L	7-31-1991	FAMU	30 26 36	84 06 11	1.5 km NE Chaires

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Oecetis inconspicua	Steinhatchee R	Fenholloway R	Taylor	L	7-31-1991	FAMU	30 04 19	83 39 39	SR 356
Oecetis inconspicua	Suwannee R, upper	Suwannee R	Hamilton	A	4-13-1977	FAMU	30 19 33	82 44 20	SR 41
Oecetis inconspicua	Suwannee R, upper	Suwannee R	Suwannee	A	4-13-1977	FAMU	30 24 01	83 09 30	Suwannee R State Park
Oecetis inconspicua	Waccasassa R	Waccasassa R	Levy	L	10-17-1951	FAMU			none
Oecetis inconspicua	Withlacoochee R, S.	Withlacoochee R	Pasco	L	5-26-1953	FAMU			W Basin
Oecetis inconspicua	Withlacoochee R, S.	Withlacoochee R	Pasco	L	5-11-1954	FAMU			W Basin
Oecetis inconspicua	unknown	Ocean Pond	Baker	A	9-22-1976	FAMU	30 13 00	82 26 00	Osceola Nat. Forest
Oecetis inconspicua	unknown	Ocean Pond	Baker	A	2-6-1977	FAMU	30 22 58	82 19 54	Osceola Nat. For. E fire Tower
Oecetis inconspicua	unknown	Ocean Pond	Baker	A	4-14-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For. Rt. 90
Oecetis inconspicua	unknown	Ocean Pond	Baker	A	5-16-1977	FAMU	30 12 00	82 30 00	Osceola Nat. For. jct. Rt. 90
Oecetis inconspicua	unknown	Ocean Pond	Baker	L	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For. Rec. Area
Oecetis morsei	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Oecetis nocturna	Escambia R	Escambia R	Escambia	L	7-7-1977	FDEP-Pensacola	30 58 01	87 13 56	Hwy. 4, live corbicula
Oecetis nocturna	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Oecetis nocturna	Ochlockonee R	FAMU Farm St	Gadsden	A	10-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis nocturna	Ochlockonee R	Little R	Gadsden	A	6-10-1986	FAMU	30 30 45	84 31 24	C-268, 6.5 Mi SE Quincy
Oecetis nocturna	Ochlockonee R	Oklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	C-267, 10 mi S Quincy
Oecetis nocturna	St. Johns R, upper	L. Wekiva R	Seminole	L		FAMU			none
Oecetis nocturna	St. Johns R, upper	Sweetwater Branch	Flager	L	8-15-1951	FAMU			none
Oecetis nocturna	St. Marks R	St. Marks R	Leon	L	7-31-1991	FAMU	30 24 36	84 05 41	1 km S US-27
Oecetis osteni	Apalachicola R	small stream	Liberty	A	5-8-1968	FAMU	30 34 09	84 56 51	Torreya State Park
Oecetis osteni	Aucilla R	Aucilla R	Jefferson	A	8-24-1967	FAMU			none
Oecetis osteni	Blackwater R	Blackwater R	Okaloosa	A	4-13-1973	FAMU	30 44 20	86 47 12	FAMU Bio. Sta., 4.5 mi NW Holt
Oecetis osteni	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oecetis osteni	Ochlockonee R	Attapulgus Ck	Gadsden	A	4-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Oecetis osteni	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis osteni	Ochlockonee R	Little R	Gadsden	A	6-10-1986	FAMU	30 30 45	84 31 24	C-268, 6.5 mi SE Quincy
Oecetis osteni	Ochlockonee R	Oklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	C-267, 10 mi S Quincy
Oecetis osteni	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	1-14-1987	FAMU			SR-12 bridge
Oecetis osteni	Suwannee R, upper	Suwannee R	Hamilton	A	3-29-1977	FAMU	30 19 54	82 46 01	nr. S. Foster Mem.
Oecetis osteni	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Oecetis osteni	unknown	Ocean Pond	Baker	A	5-16-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For.
Oecetis osteni	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For.
Oecetis parva	Choctawhatchee R	Lucas Lake	Washington	L		(Floyd, 1994)			public boat ramp, 9 km SSE Vernon

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Oecetis parva	unknown	unknown	Osceola	A		(Banks, 1907)			Kissimmee
Oecetis persimilis	Aucilla R	Aucilla R	Jefferson	L	6-19-1991	FAMU	30 08 51	83 58 14	US 98
Oecetis persimilis	Ochlockonee R	Little R	Gadsden	A	6-10-1986	FAMU	30 30 45	84 31 24	C-268, 6.5 mi SE Quincy
Oecetis persimilis	Ochlockonee R	Quincy Ck	Gadsden	L	9-23-1987	FAMU	30 35 15	84 35 00	nr. Quincy
Oecetis persimilis	Ochlockonee R	Telogia Ck	Gadsden	L	7-1-1987	FAMU			@ 65D bridge
Oecetis persimilis	Peace R	Bear Branch Stream	Polk	L,P	1-9-1951	FAMU			none
Oecetis persimilis	Perdido R	Perdido R	Escambia	L	8-24-1976	FDEP-Pensacola	30 36 14	87 24 15	Hwy. 184
Oecetis persimilis	Santa Fe R	Santa Fe R	Alachua	L	7-14-1952	FAMU			none
Oecetis persimilis	St. Johns R, lower	Black Ck	Clay	L	1-4-1952	FAMU			none
Oecetis persimilis	St. Johns R, lower	small stream	Clay	L	6-25-1951	FAMU			none
Oecetis persimilis	St. Johns R, upper	Oklawaha R	Marion	L	3-13-1952	FAMU			none
Oecetis persimilis	St. Marks R	Burnt Mill Ck	Jefferson	A	5-19-1980	FAMU	30 25 31	84 01 11	St. Hwy. 59
Oecetis persimilis	St. Marks R	Burnt Mill Ck	Jefferson	A	7-29-1980	FAMU	30 25 31	84 01 11	St. Hwy. 59
Oecetis persimilis	St. Marks R	Burnt Mill Ck	Jefferson	A	8-17-1980	FAMU	30 25 31	84 01 11	St. Hwy. 59
Oecetis persimilis	St. Marks R	Burnt Mill Ck	Jefferson	L	6-29-1991	FAMU	30 25 31	84 01 11	St. Hwy. 59
Oecetis persimilis	St. Marks R	Burnt Mill Ck	Jefferson	L	7-31-1991	FAMU	30 25 31	84 01 11	St. Hwy. 59
Oecetis persimilis	Steinhatchee R	Econfina R	Taylor	L	6-19-1991	FAMU	30 08 33	83 51 58	US-98
Oecetis persimilis	Steinhatchee R	Fenholloway R	Taylor	L	9-12-1951	FAMU			none
Oecetis persimilis	Suwannee R, lower	small stream	Lafayette	L	7-7-1953	FAMU			none
Oecetis persimilis	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	Rt. 41
Oecetis persimilis	Suwannee R, upper	Suwannee R	Hamilton	L	6-10-1953	FAMU			none
Oecetis persimilis	Suwannee R, upper	small stream	Hamilton	L	3-10-1991	FAMU			none
Oecetis persimilis	Withlacoochee R, S.	Withlacoochee R	Pasco	L	5-11-1954	FAMU			W. Basin
Oecetis persimilis	Withlacoochee R, S.	Withlacoochee R	Pasco	P	3-9-1955	FAMU			W. Basin
Oecetis persimilis	unknown	Ocean Pond	Baker	A	5-16-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For.
Oecetis persimilis	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	jct. S-241& S-241E
Oecetis porteri	Kissimmee R	Lake Clay	Highlands	L	9-8-1981	FDEP-Punta Gorda			none
Oecetis porteri	Kissimmee R	Lake Josephine	Highlands	L	1-29-1985	FDEP-Punta Gorda	27 24 00	81 25 00	none
Oecetis porteri	Peace R	Lake McCloud	Polk	L	8-8-1951	FAMU			Eloise
Oecetis porteri	Santa Fe R	Santa Fe Lake	Alachua	L	2-21-1992	J. H. Epler			none
Oecetis porteri	Southeast FL Coast	unknown	Dade	A	11-20-1945	(Ross, 1947)	25 46 28	80 11 38	Miami
Oecetis porteri	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU			Osceola Nat. For.
Oecetis pratelia	unknown	unknown	Hendry	A	7-16-1939	(Denning, 1948b)			LaBelle
Oecetis sp. A Floyd	Caloosahatchee R	Roberts Canal	Hendry	L	1-30-1987	FDEP-Punta Gorda			none

TRICHOPTERA DATABASE: FLORIDA LEPTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Oecetis sp. A Floyd	Choctawhatchee Bay	Lafayette Ck	Walton	L	2-20-1978	FDEP-Pensacola	30 29 35	86 07 31	Rt. 20
Oecetis sp. A Floyd	Fisheating Ck	Fisheating Ck	Glades	L	8-30-1983	FDEP-Punta Gorda			at Rt. 27
Oecetis sp. A Floyd	Peace R	Peace R	De Soto	L	3-3-1981	FDEP-Punta Gorda			above Rt. 72
Oecetis sp. A Floyd	Perdido Bay	Elevenmile Ck	Escambia	L	1-4-1978	FDEP-Pensacola	30 30 00	87 20 00	above Hwy 90 & landfill
Oecetis sp. C Floyd	Kissimmee R	Lake Grassy	Highlands	L	9-26-1985	FDEP-Punta Gorda			none
Oecetis sp. C Floyd	Kissimmee R	Lake Placid	Highlands	L	12-11-1984	FDEP-Punta Gorda			none
Oecetis sp. C Floyd	Santa Fe R	Santa Fe Lake	Alachua	L	2-25-1991	J. H. Epler			none
Oecetis sp. C Floyd	unknown	Hutchinson Lake	Clay	L	3-15-1992	(Floyd, 1994)			off Rt. 214, 2.5 km S L. Geneva
Oecetis sp. C Floyd	unknown	unnamed pond	Clay	L	3-15-1993	(Floyd, 1994)			off Duval Rd., 5 km SW Kingsley L.
Oecetis sp. F Floyd	Blackwater R	Blackwater R	Okaloosa	L	7-6-1977	FDEP-Pensacola	30 50 00	86 44 02	Hwy. 4
Oecetis sp. F Floyd	Caloosahatchee R	Gator Slough Canal	Charlotte	L	10-8-1985	FDEP-Punta Gorda			none
Oecetis sp. F Floyd	Caloosahatchee R	Roberts Canal	Hendry	L	1-30-1984	FDEP-Punta Gorda			none
Oecetis sp. F Floyd	Caloosahatchee R	wet marsh	Charlotte	L		FDEP-Punta Gorda			none
Oecetis sp. F Floyd	Kissimmee R	Haw Branch Ck	Highlands	L	7-5-1984	FDEP-Punta Gorda			none
Oecetis sp. F Floyd	Kissimmee R	Lake Tohopekaliga	Osceola	L	3-16-1993	(Floyd, 1994)			@ Southport Pk., off Rt. 531
Oecetis sp. F Floyd	Lake Okeechobee	Lake Okeechobee	Okeechobee	L		FDEP-Punta Gorda			from Vallisneria
Oecetis sphyra	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Oecetis sphyra	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Oecetis sphyra	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Oecetis sphyra	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Oecetis sphyra	Ochlockonee R	Oklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	C-267, 10 mi S Quincy
Oecetis sphyra	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	Rt. 41
Oecetis sphyra	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Setodes guttatus	Chipola R	Chipola R	Calhoun	A	6-28-1972	FAMU	30 25 52	85 10 19	Hwy. 20
Setodes n. sp.	Chipola R	Chipola R	Calhoun	A	6-28-1972	FAMU	30 25 52	85 10 19	Hwy. 20
Triaenodes abus	unknown	unknown	Columbia	A	4-12-1977	FAMU	30 12 00	82 30 00	Osceola Nat. For.,jct S-234 & US90
Triaenodes flavescens	St. Marks R	St. Marks R	Wakulla	L	6-22-1962	FAMU			none
Triaenodes flavescens	St. Marks R	St. Marks R	Wakulla	L	12-9-1991	FAMU	30 12 14	84 10 38	US-98 at Newport
Triaenodes flavescens	St. Marks R	St. Marks R	Wakulla	L	12-9-1992	FAMU	30 12 14	84 10 38	US-98 at Newport
Triaenodes florida	Choctawhatchee R	unknown	Washington	A	5-30-1940	(Ross, 1941)			Ebro
Triaenodes florida	Kissimmee R	Lake Annie	Highlands	L	4-23-1985	FDEP-Punta Gorda			none
Triaenodes florida	Oklawaha R	Red Water Lake	Putnam	A	4-23-1966	FAMU			none
Triaenodes florida	unknown	unknown	Alachua	A	4-2-1939	(Ross, 1941)	29 39 07	82 19 31	Gainesville
Triaenodes florida	unknown	unknown	Alachua	A	6-20-1948	FAMU	29 39 07	82 19 31	Gainesville

TRICHOPTERA DATABASE: FLORIDA LEPTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Triaenodes florida	unknown	unknown	Levy	A	6-3-1954	FAMU			none
Triaenodes furcellus	Charlotte Harbor	Alligator Ck	Charlotte	L	10-18-1983	FDEP-Punta Gorda			North Prong
Triaenodes furcellus	Fisheating Ck	Fisheating Ck	Glades	L	4-29-1987	FDEP-Punta Gorda			@ Rt. 78
Triaenodes furcellus	Kissimmee R	Arbuckle Ck	Highlands	L	12-12-1977	FDEP-Punta Gorda			below Arbuckle Ck Rd.
Triaenodes furcellus	Kissimmee R	Kissimmee R	Highlands	L	5-5-1961	FAMU			along US 98
Triaenodes furcellus	Kissimmee R	Lake Placid	Highlands	L	9-18-1985	FDEP-Punta Gorda			none
Triaenodes furcellus	St. Johns R, upper	unknown	Putnam	A		(Ross, 1959)	29 23 31	81 38 20	Georgetown
Triaenodes furcellus	unknown	unknown	Hillsborough	A	4-19-1960	FAMU			none
Triaenodes furcellus	unknown	unknown	Orange	A	5-5-1944	(Ross, 1959)			Orlando
Triaenodes helo	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Triaenodes helo	Peace R	tributary	Highlands	L	3-16-1993	(Glover, 1993)	27 28 23	81 31 41	Highlands Hammock State Park
Triaenodes helo	St. Johns R, lower	trib. of Six Mile Ck	Duvall	L	3-15-1993	(Glover, 1993)			none
Triaenodes helo	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Triaenodes helo	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Triaenodes ignitus	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Triaenodes ignitus	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Triaenodes ignitus	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Triaenodes ignitus	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Triaenodes ignitus	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Triaenodes ignitus	Apalachicola R	Little Sweetwater Ck	Liberty	L	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Triaenodes ignitus	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Triaenodes ignitus	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	3 mi NW Havana
Triaenodes ignitus	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Triaenodes ignitus	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Triaenodes ignitus	Ochlockonee R	Little R	Gadsden	A	6-10-1986	FAMU	30 30 45	84 31 24	C-268, 6.5 mi SE Quincy
Triaenodes ignitus	Ochlockonee R	Oklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	C-267, 10 mi S Quincy
Triaenodes ignitus	Peace R	Horse Ck	DeSoto	L	2-17-1981	FAMU			@ Rt. 72
Triaenodes ignitus	St. Andrews Bay	Sweetwater Ck	Bay	L	2-21-1995	FAMU			@ US Hwy 231, 6 km N Fountain
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	A	7-17-1980	FAMU	30 25 31	84 01 11	at bridge St. Hwy 59
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	L	6-3-1992	FAMU	30 25 31	84 01 11	CR-59
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	L	9-29-1992	FAMU	30 25 31	84 01 11	CR-59
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	L	12-2-1992	FAMU	30 24 30	84 03 50	US Hwy 27
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	L	12-2-1992	FAMU	30 25 31	84 01 11	CR-59
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	L	2-4-1993	FAMU	30 25 31	84 01 11	CR-59

TRICHOPTERA DATABASE: FLORIDA LEPTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Triaenodes ignitus	St. Marks R	Burnt Mill Ck	Jefferson	L	4-1-1993	FAMU	30 25 31	84 01 11	CR-59
Triaenodes ignitus	St. Marks R	St. Marks R	Wakulla	L	6-22-1955	FAMU			none
Triaenodes ignitus	Steinhatchee R	Fenholloway R	Taylor	A	7-4-1953	FAMU			none
Triaenodes ignitus	Suwannee R, lower	Suwannee R	Lafayette	L	11-12-1953	FAMU			none
Triaenodes ignitus	Suwannee R, upper	Suwannee R	Hamilton	A	9-22-1976	FAMU	30 19 33	82 44 20	@ Rt. 41
Triaenodes ignitus	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Triaenodes ignitus	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Triaenodes ignitus	unknown	unknown	Columbia	A	4-12-1977	FAMU	30 12 00	82 30 00	Osceola Nat. For, jct S-234 & Rt 90
Triaenodes n. sp. A						(Glover, 1993)			[no specific locality mentioned]
Triaenodes n. sp. C						(Glover, 1993)			[no specific locality mentioned]
Triaenodes nox	Ochlockonee R	Ochlockonee R	Leon	A	4-29-1981	FAMU	30 31 43	84 23 23	Wildlife mgnt. area, nr Tower Rd.
Triaenodes nox	St. Marks R	Lake Miccosukee	Jefferson	L	4-11-1951	FAMU			nr US 90
Triaenodes ochraceus	Aucilla R	Aucilla R	Jefferson	L	2-25-1993	FAMU	30 29 34	83 43 52	US Hwy 90
Triaenodes ochraceus	Ochlockonee R	Attapulgus Ck	Gadsden	A	4-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Triaenodes ochraceus	St. Johns, lower	trib. Six Mile Ck	Duval	L	3-15-1993	(Glover, 1993)			none
Triaenodes perna	Aucilla R	Aucilla R	Jefferson	L	12-16-1991	(Glover, 1993)	30 22 22	83 48 21	at US 27 bridge
Triaenodes perna	Chipola R	Chipola R	Jackson	L	12-15-1991	(Glover, 1993)	30 48 51	85 14 00	Florida Caverns State Park
Triaenodes perna	St. Johns R, upper	Lake Howell	Seminole	L	10-13-1959	(Glover, 1993)			none
Triaenodes tardus	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	7-27-1977	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	12-7-1977	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	1-4-1978	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	2-3-1978	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	3-10-1978	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	4-28-1978	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L	5-8-1978	(Glover, 1993)	30 32 00	84 19 00	none
Triaenodes tardus	Ochlockonee R	Lake Jackson	Leon	L,P	8-5-1978	(Glover, 1993)	30 32 00	84 19 00	none

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA LIMNEPHILIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Ironquia punctatissima	Ochlockonee R	Ochlockonee R	Leon	L	2-10-1977	FDEP-Pensacola	30 40 08	84 18 23	SR-12
Ironquia punctatissima	Ochlockonee R	unknown	Leon	A	11-15-1967	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Ironquia punctatissima	St. Marks R	St. Marks R	Leon	L	2-5-1992	FAMU	30 26 36	84 06 11	1.5 km NE of Chaires
Pycnopsyche antica	Apalachicola R	Beaver Dam Ck	Liberty	A	12-7-1994	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Pycnopsyche antica	Apalachicola R	Beaver Dam Ck	Liberty	A	10-26-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Pycnopsyche antica	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Pycnopsyche antica	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Pycnopsyche antica	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Pycnopsyche antica	Ochlockonee R	unknown	Gadsden	A	10-13-1958	FAMU	30 35 15	84 35 00	Quincy
Pycnopsyche antica	Ochlockonee R	unknown	Gadsden	A	11-3-1958	FAMU	30 35 15	84 35 00	Quincy
Pycnopsyche antica	Ochlockonee R	unknown	Leon	A	10-20-1967	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Pycnopsyche antica	Ochlockonee R	unknown	Leon	A	11-15-1967	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Pycnopsyche antica	Suwannee R, upper	Rocky Ck	Suwannee	A	10-20-1976	FAMU	30 18 58	82 50 41	S-136
Pycnopsyche antica	unknown	unknown	Baker	A	11-10-1976	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line, Hwy 90
Pycnopsyche antica	unknown	unknown	Gadsden	A		(Wojtowicz, 1982)			none
Pycnopsyche antica	unknown	unknown	Jefferson	A	11-13-1958	FAMU	30 32 43	83 52 13	Monticello
Pycnopsyche antica	unknown	unknown	Okaloosa	A		(Wojtowicz, 1982)			none
Pycnopsyche indiana	unknown	unknown	unknown			(Wojtowicz, 1982)			Coastal Plain streams

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA MOLANNIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Molanna blenda	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Molanna blenda	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Molanna blenda	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Molanna blenda	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Molanna blenda	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Molanna blenda	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Molanna blenda	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Molanna blenda	Ochlockonee R	FAMU Farm Stream	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Molanna blenda	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8-18-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Molanna tryphena	Apalachicola R	Beaver Dam Ck	Liberty	A	12-7-1994	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Beaver Dam Ck	Liberty	A	10-26-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Little Sweetwater Ck	Liberty	A	4-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Little Sweetwater Ck	Liberty	A	12-7-1994	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Molanna tryphena	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Molanna tryphena	Blackwater R	Bone Ck	Okaloosa	L	12-17-1978	FAMU	30 44 00	86 45 00	none
Molanna tryphena	Choctawhatchee Bay	Eagle Ck	Walton	L	4-27-1977	FDEP-Pensacola	30 27 50	86 22 37	Hwy. 20
Molanna tryphena	Choctawhatchee Bay	Lafayette Ck	Walton	L	1-8-1972	FAMU	30 29 35	86 07 31	Hwy. 20
Molanna tryphena	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Molanna tryphena	St. Marks R	Burnt Mill Ck	Jefferson	L	12-2-1992	FAMU	30 24 30	84 03 50	US Hwy 27
Molanna tryphena	Steinhatchee R	Econfina R	Taylor	L	6-16-1991	FAMU	30 15 01	83 42 04	US Hwy 27
Molanna tryphena	Steinhatchee R	Econfina R	Taylor	L	10-22-1991	FAMU	30 15 01	83 42 04	US Hwy 27
Molanna tryphena	Steinhatchee R	Econfina R	Taylor	L	12-9-1991	FAMU	30 15 01	83 42 04	US Hwy 27
Molanna tryphena	Steinhatchee R	Econfina R	Taylor	L	12-9-1992	FAMU	30 15 01	83 42 04	US Hwy 27
Molanna tryphena	Steinhatchee R	Econfina R	Taylor	L	2-18-1993	FAMU	30 15 01	83 42 04	US Hwy 27
Molanna tryphena	Steinhatchee R	Fenholloway R	Taylor	L	7-31-1991	FAMU	30 04 37	83 29 46	@ Fenholloway
Molanna tryphena	Suwannee R, upper	Suwannee R	Hamilton	L	12-17-1991	FAMU	30 33 54	82 43 27	7.5 km N SR-6
Molanna tryphena	Suwannee R, upper	Suwannee R	Hamilton	L	6-24-1992	FAMU	30 33 54	82 43 27	7.5 km N SR-6
Molanna tryphena	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Molanna tryphena	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Molanna tryphena	unknown	Black Branch	Clay	L	6-13-1990	FDEP-Tallahassee	29 57 00	81 54 00	Camp Blanding
Molanna ulmerina	Chipola R	unknown	Jackson	A	4-13-1960	FAMU	30 48 51	85 14 00	Florida Caverns
Molanna ulmerina	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA ODONTOCERIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Psilotreta frontalis	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Kelley Branch	Liberty	A	10-26-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Kelley Branch	Liberty	L	3-11-1994	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Little Sweetwater Ck	Liberty	L	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	Little Sweetwater Ck	Liberty	L	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Psilotreta frontalis	Apalachicola R	unnamed stream	Liberty	A	3-22-1995	FAMU	30 27 55	84 59 07	ABRP, just NE of bluff overlook
Psilotreta frontalis	Ochlockonee R	Bear Ck	Gadsden	A	5-13-1970	(Parker & Wiggins, 1987)	30 28 16	84 35 32	1 mi. N Hwy 65C
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	A	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	12-5-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	2-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	6-10-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	10-14-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	4-7-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	9-28-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	1-27-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	4-19-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	FAMU Farm St	Gadsden	L	8-18-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Psilotreta frontalis	Ochlockonee R	Turkey Ck	Gadsden	A	4-24-1994	FAMU	30 31 15	84 34 53	4 mi. S Quincy, off Hwy 267A

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA PHILOPOTAMIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Chimarra aterrima	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Chimarra aterrima	Apalachicola R	Beaver Dam Ck	Liberty	A	8-30-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Chimarra aterrima	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Chimarra aterrima	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Chimarra aterrima	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Chimarra aterrima	Apalachicola R	unnamed stream	Liberty	A	3-22-1995	FAMU	30 27 55	84 59 07	ABRP, 5 km N of Bristol
Chimarra aterrima	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Chimarra aterrima	Ochlockonee R	Turkey Ck	Gadsden	A	8-21-1994	FAMU	30 31 15	84 34 53	headwaters, 5 km S Quincy
Chimarra aterrima	Oklawaha R	Hogtown Ck	Alachua	A	5-31-1958	FAMU	29 39 07	82 19 31	wooded ravine, Gainesville
Chimarra aterrima	Oklawaha R	unknown	Alachua	A	3-20-1964	FAMU	29 39 07	82 19 31	Devil's Millhopper, Gainesville
Chimarra aterrima	Suwannee R, upper	Rocky Ck	Suwannee	A	9-28-1976	FAMU	30 18 57	82 50 42	SR-136
Chimarra aterrima	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Chimarra aterrima	unknown	unknown	Alachua	A	3-8-1955	FAMU			none
Chimarra aterrima	unknown	unknown	Clay	A	5-20-1961	FAMU			Camp Crystal, ravine stream
Chimarra falculata	Apalachicola R	Beaver Dam Ck	Liberty	A	8-30-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Kelley Branch	Liberty	A	10-26-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Chimarra falculata	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Chimarra falculata	Choctawhatchee Bay	Rocky Ck	Walton	A	3-14-1979	(Lago & Harris, 1987)	30 39 00	86 20 00	4 mi SW Mossy Head
Chimarra falculata	Choctawhatchee Bay	Rocky Ck	Walton	A	4-25-1979	(Lago & Harris, 1987)	30 39 00	86 20 00	4 mi SW Mossy Head
Chimarra falculata	Choctawhatchee Bay	Rocky Ck	Walton	A	5-11-1979	(Lago & Harris, 1987)	30 39 00	86 20 00	4 mi SW Mossy Head
Chimarra falculata	Choctawhatchee Bay	Rocky Ck	Walton	A	6-8-1979	(Lago & Harris, 1987)	30 39 00	86 20 00	4 mi SW Mossy Head
Chimarra falculata	Choctawhatchee Bay	Rocky Ck	Walton	A	8-16-1979	(Lago & Harris, 1987)	30 39 00	86 20 00	4 mi SW Mossy Head
Chimarra falculata	Choctawhatchee Bay	Rocky Ck	Walton	A	9-19-1979	(Lago & Harris, 1987)	30 39 00	86 20 00	4 mi SW Mossy Head
Chimarra falculata	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	10 mi S Quincy, C-267
Chimarra falculata	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Chimarra falculata	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Chimarra florida	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol

TRICHOPTERA DATABASE: FLORIDA PHILOPOTAMIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Chimarra florida	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Chimarra florida	Apalachicola R	unnamed stream	Liberty	A	3-22-1995	FAMU	30 27 55	84 59 07	ABRP, 5 km N of Bristol
Chimarra florida	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Chimarra florida	Choctawhatchee Bay	unknown	Walton	A	4-3-1938	(Ross, 1944)	30 30 15	86 08 10	Freeport
Chimarra florida	Kissimmee R	unknown	Highlands	A	3-8-1958	FAMU	27 29 44	81 26 28	Sebring
Chimarra florida	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	CR-159
Chimarra florida	Ochlockonee R	Telogia Ck	Liberty	A		FAMU	30 27 00	84 51 43	C-271
Chimarra florida	Ochlockonee R	Telogia Ck	Liberty	A	4-29-1987	FAMU	30 25 36	84 55 39	S-20
Chimarra florida	Oklawaha R	unknown	Alachua	A	9-23-1972	FAMU	29 39 07	82 19 31	Gainesville
Chimarra florida	Suwannee R, upper	Suwannee R	Hamilton	A	3-29-1977	FAMU	30 19 54	82 46 01	Stephen Foster Memorial
Chimarra florida	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Chimarra florida	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. Forest
Chimarra moselyi	Apalachicola R	unnamed stream	Liberty	A	3-22-1995	FAMU	30 27 55	84 59 07	ABRP, 5 km N of Bristol
Chimarra moselyi	Ochlockonee R	Turkey Ck	Gadsden	A	8-21-1994	FAMU	30 31 15	84 34 53	headwaters, 5 km S Quincy
Chimarra moselyi	Santa Fe R	Santa Fe R	Alachua	A	3-12-1938	(Ross, 1948b)	29 49 33	82 38 55	Santa Fe R @ Poe Springs
Chimarra moselyi	Santa Fe R	Santa Fe R	Alachua	A	4-6-1940	(Ross, 1948b)			[no specific locality]
Chimarra obscura	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Chimarra obscura	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Chimarra obscura	Santa Fe R	Santa Fe R	Columbia	A	5-4-1958	FAMU	29 55 00	82 35 00	O'Leno State Park
Chimarra parasocia						(Lago & Harris, 1987)			[previous records of C. socia]
Wormaldia moesta	Chipola R	Bridge Ck	Jackson	L	2-23-1993	FDEP-Pensacola	30 43 52	85 11 07	Hwy 71
Wormaldia moesta	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA PHRYGANEIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Agrypnia vestita	Apalachicola R	unknown	Liberty	A	4-17-1963	FAMU	30 34 09	84 56 51	Torreya State Park
Agrypnia vestita	Ochlockonee R	unknown	Leon	A	10-20-1967	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Agrypnia vestita	Ochlockonee R	unknown	Leon	A	11-15-1967	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Agrypnia vestita	Suwannee R, upper	Roaring Ck	Hamilton	L	1-17-1994	J. Epler	30 26 00	82 41 00	none
Agrypnia vestita	unknown	unknown	Okaloosa	A	9-29-1960	FAMU			none
Banksiola concatenata	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Banksiola concatenata	Ochlockonee R	unknown	Leon	A	4-4-1968	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Banksiola concatenata	Oklawaha R	unknown	Alachua	A	4-4-1967	FAMU	29 37 07	82 19 31	Gainesville
Banksiola concatenata	Oklawaha R	unknown	Alachua	A	4-5-1967	FAMU	29 37 07	82 19 31	Gainesville
Banksiola concatenata	Suwannee R, upper	unknown	Suwannee	A	4-13-1977	FAMU	30 24 01	83 09 30	Suwannee R State Park
Banksiola concatenata	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond rec. area
Ptilostomis postica	Blackwater R	Blackwater R	Okaloosa	A	5-1-1977	FAMU	30 44 20	86 47 12	FAMU Biological Station, 4.5 mi NW Holt
Ptilostomis postica	Ochlockonee R	unknown	Leon	A	10-20-1967	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Ptilostomis postica	Ochlockonee R	unknown	Leon	A	4-4-1968	FAMU	30 39 00	86 45 00	Tall Timbers Research Station
Ptilostomis postica	Suwannee R, upper	unknown	Suwannee	A	4-25-1977	FAMU	30 24 01	83 09 30	Suwannee R State Park
Ptilostomis postica	unknown	unknown	Jefferson	A	4-7-1959	FAMU	30 32 43	83 52 13	Monticello
Ptilostomis postica	unknown	unknown	Jefferson	A	4-27-1959	FAMU	30 32 43	83 52 13	Monticello
Ptilostomis postica	unknown	unknown	Jefferson	A	5-5-1959	FAMU	30 32 43	83 52 13	Monticello
Ptilostomis postica	unknown	unknown	Jefferson	A	5-2-1960	FAMU	30 32 43	83 52 13	Monticello
Ptilostomis postica	unknown	unknown	Jefferson	A	4-25-1961	FAMU	30 32 43	83 52 13	Monticello

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA POLYCENTROPODIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Cernotina calcea	Aucilla R	Aucilla R	Jefferson	A	10-14-1993	FAMU	30 16 25	83 51 25	SR-257, 8 mi S of Lamont
Cernotina calcea	Chipola R	Bridge Ck	Jackson	A	5-4-1995	FAMU	30 43 52	85 11 07	Hwy. 71
Cernotina calcea	Chipola R	Chipola R	Calhoun	A	8-1-1972	FAMU	30 25 52	85 10 19	Hwy. 20
Cernotina calcea	unknown	unknown	Alachua	A		(Gordon, 1984)			none
Cernotina spicata	Ochlockonee R	Attapulgus Ck	Gadsden	A	5-14-1986	FAMU	30 39 46	84 27 48	C-159, 3 mi NW Havana
Cernotina truncona	East Coast, Upper	unknown	Volusia	A	6-27-1945	(Ross, 1947)	29 12 40	81 01 23	Daytona Beach
Cernotina truncona	unknown	unknown	Alachua	A		(Gordon, 1984)			none
Cernotina truncona	unknown	unknown	Baker	A		(Gordon, 1984)			none
Cernotina truncona	unknown	unknown	Pasco	A		(Gordon, 1984)			none
Cernotina truncona	unknown	unknown	Putnam	A		(Gordon, 1984)			none
Cyrnellus fraternus	Apalachicola R	Apalachicola R	Jackson	L	9-25-1990	FDEP-Tallahassee			Scholz up A
Cyrnellus fraternus	Chipola R	Chipola R	Calhoun	A	8-1-1972	FAMU	30 25 52	85 10 19	SR-20
Cyrnellus fraternus	Fisheating Ck	Fisheating Ck	Glades	L	8-6-1985	FDEP-Punta Gorda	26 55 59	81 18 56	Rt. 27 in Palmdale
Cyrnellus fraternus	Ochlockonee R	Little R	Gadsden	L	8-27-1991	FAMU	30 33 12	84 30 52	US Hwy. 90, 4.5 mi E Quincy
Cyrnellus fraternus	Ochlockonee R	Ocklawaha Ck	Gadsden	A	8-24-1986	FAMU	30 27 03	84 38 36	10 mi S Quincy, C-267
Cyrnellus fraternus	Oklawaha R	Redwater Lake	Putnam	A	5-27-1967	FAMU	29 34 00	82 01 00	Redwater Lake
Cyrnellus fraternus	Peace R	Bear Branch Stream	Polk	L	7-27-1955	FAMU			none
Cyrnellus fraternus	Santa Fe R	Santa Fe R	Suwannee	L	6-4-1992	SRWMD	29 54 43	82 51 38	CR-129
Cyrnellus fraternus	St. Johns R, lower	Dunn's Ck	Putnam	L	3-5-1974	FDEP-Jacksonville	29 34 40	81 37 35	US-17
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Hamilton	L	6-26-1991	FAMU	30 33 54	82 43 27	7.5 km N SR-6
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Hamilton	L	2-26-1992	FAMU	30 33 54	82 43 27	7.5 km N SR-6
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	6-26-1991	FAMU	30 23 35	82 55 57	0.5 km E US Hwy. 129
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	9-19-1991	FAMU	30 23 35	82 55 57	0.5 km E US Hwy. 129
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	9-19-1991	FAMU	30 24 13	83 09 30	Suwannee R State Park
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	10-29-1991	FAMU	30 23 35	82 55 57	0.5 km E US Hwy. 129
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	10-29-1991	FAMU	30 24 13	83 09 30	Suwannee R State Park
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	12-17-1991	FAMU	30 24 13	83 09 30	Suwannee R State Park
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	2-26-1992	FAMU	30 23 35	82 55 57	0.5 km E US Hwy. 129
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	6-24-1992	FAMU	30 23 35	82 55 57	0.5 km E US Hwy. 129
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	8-26-1992	FAMU	30 24 13	83 09 30	Suwannee R State Park
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	10-28-1992	FAMU	30 24 13	83 09 30	Suwannee R State Park
Cyrnellus fraternus	Suwannee R, upper	Suwannee R	Suwannee	L	4-28-1993	FAMU	30 23 35	82 55 57	0.5 km E US Hwy. 129

TRICHOPTERA DATABASE: FLORIDA POLYCENTROPODIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Cyrnellus fraternus	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	4-22-1992	FAMU	30 30 13	83 14 32	3 km N SR-6
Cyrnellus fraternus	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	8-26-1992	FAMU	30 30 13	83 14 32	3 km N SR-6
Cyrnellus fraternus	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	10-28-1992	FAMU	30 30 13	83 14 32	3 km N SR-6
Cyrnellus fraternus	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	12-16-1992	FAMU	30 30 13	83 14 32	3 km N SR-6
Cyrnellus fraternus	Withlacoochee R, S.	Withlacoochee R	Citrus	L	9-16-1993	FDEP-Tampa	28 59 19	82 21 00	Stokes Ferry
Cyrnellus fraternus	Withlacoochee R, S.	Withlacoochee R	Pasco	L	3-9-1955	FAMU			none
Cyrnellus fraternus	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Cyrnellus fraternus	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., campground
Cyrnellus fraternus	unknown	unknown	Hillsborough	A	5-19-1960	FAMU	27 56 52	82 27 31	Tampa
Neureclipsis crepuscularis	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N Bristol
Neureclipsis crepuscularis	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N Bristol
Neureclipsis crepuscularis	Apalachicola R	unnamed stream	Liberty	A	3-22-1995	FAMU	30 27 55	84 59 07	ABRP, 5 km N Bristol
Neureclipsis crepuscularis	Apalachicola R	unnamed stream	Liberty	A	10-26-1995	FAMU	30 27 55	84 59 07	ABRP, 5 km N Bristol
Neureclipsis crepuscularis	Aucilla R	Aucilla R	Jefferson	L	8-21-1991	FAMU	30 22 22	83 48 21	US 27-19
Neureclipsis crepuscularis	Aucilla R	Aucilla R	Jefferson	L	6-17-1992	FAMU	30 08 51	83 58 14	US-98
Neureclipsis crepuscularis	Aucilla R	Aucilla R	Jefferson	L	12-16-1992	FAMU	30 29 34	83 43 52	US-90
Neureclipsis crepuscularis	Aucilla R	Aucilla R	Jefferson	L	4-14-1993	FAMU	30 08 51	83 58 14	US-98
Neureclipsis crepuscularis	Blackwater R	Blackwater R	Okaloosa	L	1-30-1971	FAMU	30 59 22	86 43 15	1st bridge S Alabama line
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	5-29-1991	FAMU	30 24 30	84 03 50	US Hwy 27
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	10-10-1991	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	12-3-1991	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	4-1-1992	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	6-3-1992	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	9-29-1992	FAMU	30 24 30	84 03 50	US Hwy 27
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	9-29-1992	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	12-2-1992	FAMU	30 24 30	84 03 50	US Hwy 27
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	12-2-1992	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	St. Marks R	Burnt Mill Ck	Jefferson	L	2-4-1993	FAMU	30 25 31	84 01 11	CR-59
Neureclipsis crepuscularis	Steinhatchee R	Econfina R	Taylor	L	6-19-1991	FAMU	30 08 33	83 51 58	US Hwy 98
Neureclipsis crepuscularis	Suwannee R, upper	Suwannee R	Hamilton	L	6-26-1991	FAMU	30 33 54	82 43 27	7.5 km N of SR-6
Neureclipsis crepuscularis	Suwannee R, upper	Suwannee R	Hamilton	L	9-19-1991	FAMU	30 33 54	82 43 27	7.5 km N of SR-6
Neureclipsis crepuscularis	Suwannee R, upper	Suwannee R	Hamilton	L	2-25-1993	FAMU	30 33 54	82 43 27	7.5 km N of SR-6

TRICHOPTERA DATABASE: FLORIDA POLYCENTROPODIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Neureclipsis crepuscularis	Suwannee R, upper	Suwannee R	Suwannee	L	9-19-1991	FAMU	30 23 35	82 55 57	0.5 km E of US Hwy 129
Neureclipsis crepuscularis	Suwannee R, upper	Suwannee R	Suwannee	L	2-25-1993	FAMU	30 23 35	82 55 57	0.5 km E of US Hwy 129
Neureclipsis crepuscularis	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	6-26-1991	FAMU	30 30 13	83 14 32	3 km N SR-6
Neureclipsis crepuscularis	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	10-29-1991	FAMU	30 30 13	83 14 32	3 km N SR-6
Neureclipsis crepuscularis	Withlacoochee R, N.	Withlacoochee R	Hamilton	L	12-16-1992	FAMU	30 30 13	83 14 32	3 km N SR-6
Neureclipsis melco	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Neureclipsis melco	Escambia R	Escambia R	Escambia	L	8-2-1977	FDEP-Pensacola			Escambia R, upper bluffs
Neureclipsis melco	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Neureclipsis melco	Yellow R	Turkey Gobbler Ck	Okaloosa	A	8-15-1985	FAMU	30 38 00	86 38 00	Eglin AFB Rd 211, W Hwy 85
Paranyctiophylax affinis	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Paranyctiophylax affinis	Santa Fe R	Santa Fe R	Gilchrist	A	5-6-1983	FAMU	29 50 11	82 41 58	Ginnie Springs campground
Paranyctiophylax affinis	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base
Paranyctiophylax affinis	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Paranyctiophylax affinis	unknown	Ocean Pond	Baker	A	6-2-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Paranyctiophylax affinis	unknown	unknown	Baker	A	5-16-1977	FAMU	30 12 23	82 27 25	Osceola Nat. For., co. line
Paranyctiophylax celta	Oklawaha R	unknown	Alachua	A	3-19-1966	FAMU	29 39 07	82 19 31	Gainesville
Paranyctiophylax celta	unknown	unknown	unknown	A		(Morse, 1972)			western panhandle
Paranyctiophylax moestus	unknown	unknown	unknown			(Armitage & Hamilton, 1990)			[listed as occurring in Florida]
Paranyctiophylax moestus	unknown	unknown	unknown			(Harris & Lawrence, 1978)			[listed as occurring in Florida]
Paranyctiophylax morsei	Choctawhatchee Bay	Rocky Ck	Walton	A	4-2-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	headwaters, 4 mi SW Mossy Head
Paranyctiophylax morsei	Choctawhatchee Bay	Rocky Ck	Walton	A	4-25-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	headwaters, 4 mi SW Mossy Head
Paranyctiophylax morsei	Choctawhatchee Bay	Rocky Ck	Walton	A	5-11-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	headwaters, 4 mi SW Mossy Head
Paranyctiophylax morsei	Yellow R	Bull Ck	Okaloosa	A	9-19-1979	(Lago & Harris, 1983)	30 40 17	86 25 56	10 mi ESE Crestview
Polycentropus blicklei	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	5 km N of Bristol
Polycentropus cinereus	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Polycentropus cinereus	unknown	Ocean Pond	Baker	A	4-12-1977	FAMU	30 13 00	82 26 00	Osceola Nat. For., Ocean Pond
Polycentropus crassicornis						(Banks, 1907)			
Polycentropus floridensis	Choctawhatchee Bay	Rocky Ck	Walton	A	5-11-1979	(Lago & Harris, 1983)	30 39 00	86 20 00	headwaters, 4 mi SW Mossy Head
Polycentropus interruptus	unknown	unknown	Walton	A		(Gordon, 1984)			none

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA PSYCHOMYIIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Lype diversa	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Beaver Dam Ck	Liberty	A	10-26-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	Little Sweetwater Ck	Liberty	A	10-26-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Lype diversa	Apalachicola R	unnamed stream	Liberty	A	12-7-1994	FAMU	30 27 55	84 59 07	ravine just N of ABRP overlook
Lype diversa	Chipola R	Bridge Ck	Jackson	A	5-4-1995	FAMU	30 43 52	85 11 07	Hwy 71
Lype diversa	Chipola R	Chipola R	Calhoun	A	1-8-1972	FAMU	30 25 52	85 10 19	Hwy. 20
Lype diversa	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6-12-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	10-15-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	12-5-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	2-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4-8-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6-10-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	10-14-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	12-7-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	2-11-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4-7-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6-16-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	9-28-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	1-27-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8-18-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Lype diversa	Ochlockonee R	Mule Ck	Liberty	L	7-7-1992	FDEP-Tallahassee	30 30 41	84 49 42	Hwy 12
Lype diversa	Ochlockonee R	Telogia Ck	Liberty	L	9-4-1986	FAMU	30 25 36	84 55 39	S-20 bridge
Lype diversa	Ochlockonee R	unnamed stream	Liberty	L	2-25-1974	FAMU	30 23 17	84 40 05	Hwy 20, 1 mi. W of Ochlockonee R
Lype diversa	St. Andrews Bay	Bear Ck	Bay	L	10-23-1990	FDEP-Tallahassee	30 19 13	85 27 22	US Hwy 231
Lype diversa	St. Johns R, lower	Black Ck	Clay	L	1-4-1952	FAMU			Beck Staton C
Lype diversa	St. Johns R, lower	Black Ck	Clay	L	6-13-1991	FDEP-Tallahassee			downstream of Camp Blanding
Lype diversa	Suwannee R, lower	Suwannee R	Gilchrist	L	6-4-1992	SRWMD	29 47 42	82 55 11	@ Rock Bluff
Psychomyia flavida	Chipola R	Bridge Ck	Jackson	A	5-4-1995	FAMU	30 43 52	85 11 07	Hwy 71
Psychomyia flavida	Chipola R	Chipola R	Calhoun	L	9-2-1976	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Psychomyia flavida	Chipola R	Chipola R	Calhoun	L	2-7-1977	FDEP-Pensacola	30 33 05	85 10 17	boat ramp N of SR-274
Psychomyia flavida	Chipola R	Chipola R	Calhoun	L	8-13-1992	FDEP-Tallahassee	30 32 03	85 09 54	Hwy 274
Psychomyia flavida	Chipola R	Chipola R	Calhoun	L	5-4-1995	FAMU	30 33 05	85 10 17	boat ramp 5 km W of Altha
Psychomyia flavida	Chipola R	Rocky Ck	Jackson	A	5-4-1995	FAMU	30 39 27	85 09 45	Hwy 71

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA RHYACHOPHILIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Rhyacophila carolina	Apalachicola R	Beaver Dam Ck	Liberty	A	12-7-1994	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Beaver Dam Ck	Liberty	A	3-22-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Beaver Dam Ck	Liberty	A	8-30-1995	FAMU	30 29 13	84 59 04	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Kelley Branch	Liberty	A	3-22-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Kelley Branch	Liberty	A	8-30-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Kelley Branch	Liberty	A	10-26-1995	FAMU	30 28 08	84 57 51	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Little Sweetwater	Liberty	A	12-7-1994	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Little Sweetwater Ck	Liberty	A	3-22-1995	FAMU	30 28 47	84 57 01	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	Little Sweetwater Ck	Liberty	A	8-30-1995	FAMU	30 28 21	84 59 08	ABRP, 5 km N of Bristol
Rhyacophila carolina	Apalachicola R	unnamed stream	Liberty	A	12-7-1994	FAMU	30 27 55	84 59 07	ABRP, just N of bluff overlook
Rhyacophila carolina	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	A	5-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	A	10-6-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8-14-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	12-5-1991	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	2-12-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4-8-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6-10-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	12-7-1992	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4-7-1993	FAMU	30 39 27	84 36 50	8 km N Quincy, off CR-267
Rhyacophila carolina	Perdido R	McDavid Ck	Escambia	L	6-21-1993	FDEP-Pensacola	30 44 21	87 26 57	CR-99
Rhyacophila carolina	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA SERICOSTOMATIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Agarodes crassicornis	Blackwater R	Blackwater R	Okaloosa	A	5-1-1976	FAMU	30 44 20	86 47 12	FAMU Biological Station, 4.5 mi NW Holt
Agarodes crassicornis	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Agarodes libalis	Blackwater R	Blackwater R	Okaloosa	A	4-25-1976	FAMU	30 44 20	86 47 12	FAMU Biological Station, 4.5 mi NW Holt
Agarodes libalis	Ochlockonee R	Bear Ck	Gadsden	A	5-13-1970	(Ross & Scott, 1974)	30 28 16	84 35 32	1 mi. N Hwy 65C, Rockwood Farm
Agarodes libalis	unknown	Dead Hog Ck	Alachua	L	6-4-1978	(McEwan, 1980)	29 44 00	82 27 00	San Felasco Hammock State Preserve
Agarodes n. sp.	Ochlockonee R	FAMU Farm St	Gadsden	A	5-17-1994	FAMU	30 39 27	84 36 50	8 km N Quincy, off C-267
Agarodes ziczac	Blackwater R	Blackwater R	Okaloosa	A	4-24-1970	(Ross & Scott, 1974)	30 43 29	86 47 27	2.5 mi W Holt
Agarodes ziczac	Choctawhatchee Bay	Rocky Ck	Walton	A		(Harris et al., 1982)	30 39 00	86 20 00	Eglin Air Force Base
Agarodes ziczac	Yellow R	Bull Ck	Okaloosa	A		(Harris et al., 1982)	30 40 17	86 25 56	Eglin Air Force Base
Agarodes ziczac	Yellow R	Ramer Branch	Okaloosa	A		(Harris et al., 1982)	30 40 09	86 24 32	Eglin Air Force Base

*****END OF DATA TABLE*****

TRICHOPTERA DATABASE: FLORIDA UENOIDAE

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Lat.	Long.	Additional Locality Info.
Neophylax concinnus						(Harris et al., 1991)			[no specific locality mentioned]
Neophylax sp.	Aucilla R	Aucilla R	Jefferson	L	12-9-1992	FAMU	30 22 22	83 48 21	US Hwy. 27
Neophylax sp.	Aucilla R	Aucilla R	Jefferson	L	12-16-1992	FAMU	30 29 34	83 43 52	US Hwy. 90

*****END OF DATA TABLE*****