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A SURVEY OF LAND SNAILS IN SOUTHERN ILLINOIS

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Abstract

Land snails were collected from 58 sites, primarily natural areas, in the eleven southernmost counties of Illinois. Following the classification used by Dr. Frank Baker in his Illinois Natural History Survey Manual, Fieldbook of Illinois Land Snails (1939), about 42 species and subspecies were recorded in this survey. A variety of habitats are represented, and collecting sites were scattered throughout the region. Representative specimens were labeled and preserved, and information about habitat and abundance was recorded.

The Illinois Natural History Survey and University of Illinois collections were examined, and the Baker (1939) collection data (species, locality, and habitat) for all snails from the southernmost eleven counties were recorded. Although the taxonomy has changed since 1939, and most malacologists now recognize fewer species and subspecies than were listed by Baker, his classification was used in the identification of specimens collected in this study. The more recent scientific names, as used by Hubricht (1985), are also given in Figure 8 of this report.

This survey adds new species to the lists of animals known from 32 recognized natural areas in southern Illinois. Several of these natural areas are managed and protected by the Illinois Department of Conservation and/or the Shawnee National Forest. Correlations between species and habitat types are noted, and the distribution, abundance, and rarity of certain species are indicated. The potential for using snails as indicators of environmental disturbance is discussed. The occurrence of one species of federal concern, *Stenotrema hubrichti*, was documented at a designated natural area within the Shawnee National Forest.

This study also documents the need for more field work and presents data to aid and encourage further study. Specific recommendations for future work are presented.

Introduction

The importance of preserving all native forms of life that occur within a region has become more apparent in recent years than ever in history. A major objective of natural area programs throughout the country is to identify and inventory the species of all groups that do occur, or should occur, within our designated natural areas.

Periodic inventories can help land managers recognize trends in species populations that might indicate unnatural and undesirable disturbances. The decline or disappearance of an inconspicuous species, such as a snail, from a natural area may

indicate subtle environmental changes that are not obvious to the casual observer.

As natural area management programs become more manipulative, managers must consider the effects of vegetation clearing, fire, and chemicals upon invertebrate animals as well as plants.

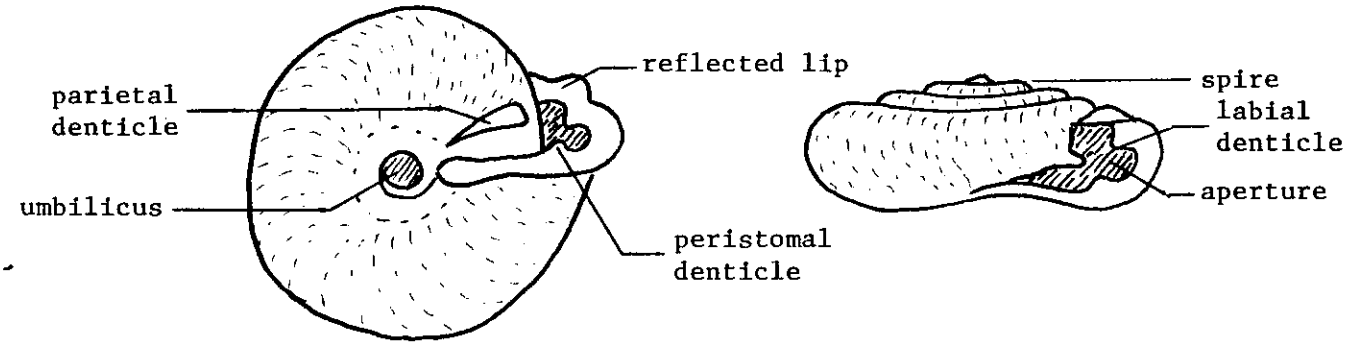
It is crucial that rare species in need of special protection are identified before the population is gone from an area. Only one snail is currently on the official list of endangered and threatened species in Illinois, because past survey work has been too limited to document species that are truly scarce or declining in numbers.

Background information about snails

Although snails are common in many types of habitats throughout southern Illinois (including gardens, yards, and roadsides), few casual observers know much about their characteristics or habits. As a group, they have received little scientific attention in the Midwest, and no general surveys of species in southern Illinois have been conducted since the 1931-32 collection by Dr. Frank Baker (the basis for his Fieldbook of Illinois Land Snails, 1939). Natural area ecologists who can distinguish one species from another are rare. Some of the reasons for this lack of attention are that snails are unglamorous and usually secretive, they move very slowly and their activities are not easy to observe, they appear to impact the environment very little, and species are not easy to identify.

Although now out of print, the Fieldbook of Illinois Land Snails is particularly useful to the amateur malacologist, because Dr. Baker points out the readily observable means of recognizing the snails using shell characters. Most other identification keys use anatomical differences in body parts (such as teeth and reproductive parts) which requires dissection and a microscope. Although positive identification of some species is not possible without examining the animal, many Illinois snails can be distinguished fairly easily using shell characters alone. It is important that researchers and natural area managers know shell characters, because 1) the shell is often the only part of a snail that is available, 2) the shell is the part that is easiest to find, 3) shells remain at a site to indicate a species' presence long after the animal is gone or dead, 4) shells may be observed and collected any season of the year and are particularly obvious in the winter when vegetation is sparse, and 5) shells often remain after fires and other catastophic disturbances to indicate species' presence and vulnerability. The drawings below illustrate major shell

characters used in identification.



The following are comments (copied from Baker, 1939 and other sources) that provide general background information.

--Snails belong to the Phylum Mollusca and the Class Gastropoda.

--Most snails have a spiral shell into which they can retire; the head and body are joined to form the exposed part of the animal.

--The head bears two pairs of tentacles; a pair of eyes is at the tips of the upper tentacles.

--The animal moves by sliding on its foot; its mouth opens on the bottom, at the anterior end of the foot.

--In the mouth is a radula, a ribbon-like structure with many teeth used in rasping food.

--All Illinois land snails are lung breathers, and the respiratory pore opens at the side, beneath the edge of the shell.

--Snails are mainly nocturnal, but they are often active in the daylight following a rain.

--Most spend the winter inside rotten logs and beneath large boulders, but they are often active during winter months when temperatures are mild.

--Most snails feed upon vegetable matter; a few are carnivorous and feed upon earthworms, leeches, or other snails.

--All Illinois land snails lay eggs in moist localities, usually in May and June; the eggs hatch 20-30 days later, and reach maturity in about two years.

--Lung breathing land snails are hermaphroditic.

--Snails need calcium for their shells, and they often get this from plants growing on limestone bedrock.

--Most snail species are associated with distinctive kinds of environment; many are restricted to certain habitats and range over a small area.

--Forested river valleys are the most favorable habitats for snails, especially where there are outcrops of limestone.

--Rights of ways, especially railroad embankments, provide habitat for a distinct fauna, species perhaps driven from prairies and natural grasslands by civilization.

--Snails are important as food for birds, salamanders, mice, moles, shrews, and squirrels; a few (mostly exotics) are garden pests; some species also serve as intermediate hosts for internal parasites that affect fish and mammals.

Description of study area

The study area is defined as the eleven southernmost counties of Illinois: Alexander, Pulaski, Massac, Pope, Hardin, Johnson, Union, Jackson, Williamson, Saline, and Gallatin (Figure 12) (two collections from outside that area are included in the study data). This is a very diverse part of the state, a point where several major natural regions meet. It is at the point on the continent where the glaciers reached their southernmost limit during Pleistocene time, and where the marine waters of the Gulf Coastal Plain reached their most northerly point (see map of Natural Divisions of Illinois, Figure 11).

The Bottomlands Section of the Coastal Plain is still wet and characterized by cypress-tupelo swamps and wet floodplain forests. The Cretaceous Hills Section once had extensive open grasslands, places with scattered trees and thickets that were called barrens by the early settlers. Disturbed weedy barrens remnants are still common in south Pope and eastern Massac counties.

The original vegetation of the Shawnee Hills was primarily oak-hickory upland forest. Sandstone cliffs, overhangs, and rocky slopes are common in this region, particularly in the Greater Shawnee Hills Section. The Lesser Shawnee Hills Section is not quite as rugged and has south-facing limestone slopes with prairie vegetation, small natural openings in the forest called glades.

The Ozark Division is still primarily forested with many deep ravines and mesic stands. A few small natural openings

occur on ridgetops where the deep loess supports prairie vegetation. This division is characterized by rugged topography and cherty limestones. High steep cliffs border the Mississippi bottomland.

The Lower Mississippi River Bottomlands Division was once mostly forested with extensive swamps and large shallow lakes. It is now almost all cleared and cultivated except for a few floodplain forest, swamp, and pond remnants.

The Mt. Vernon Hill Country Section of the Southern Till Plain Division was mostly glaciated and is more level than the Shawnee Hills to the south. It was mostly forested, but open post oak stands were common. Pin oak was common on poorly drained sites. Small prairies occurred in the northern parts of what are now Jackson and Williamson counties. The prairies are now gone except for a few disturbed remnants along rights of ways. A few small wood lots are left in Williamson County with large old post oaks.

The Bottomlands Section of the Wabash Border Division was originally forested with extensive swamps and large ponds. It is now mostly cleared and cultivated, although some relatively large wooded tracts with natural ponds still occur in the Wabash River floodplain north of Shawneetown.

Materials and methods

This study is based upon observations and collections of land snails during the last nine years in southern Illinois. Specific collecting efforts were centered around 32 natural areas, sites recognized by the Illinois Natural Areas Inventory of 1978 as being of statewide significance (see Figure 3 for area names and NAI numbers). There were 215 collections, each representing either a different species, different locality, or different collecting date (Figure 2). Collecting areas were selected to represent the diversity of natural habitats that occurs in the southernmost eleven counties, but incidental collections from many other sites (disturbed as well as natural) are included (Figure 5). Several specimens were generously contributed by local individuals who were aware of the project and happened to find snails at miscellaneous locations.

Collections, mainly of shells, were made during all seasons of the year. Notes were kept describing habitat, i.e., bedrock, soils, and vegetation types. If many individuals of a particular species were present, only a few were taken. Cleaned and empty shells, together with labels, were placed in plastic film canisters for temporary storage. A few living specimens were collected, drowned in water (to expose the animal), and preserved in 10% formalin.

Specimens were tentatively identified using Baker's key and classification. Other keys, such as How to Know the Eastern Land Snails, by John Burch, 1962, were also checked. Some snails were compared with those in the Baker collection for identification. All identifications are subject to error; several shells did not appear to key properly, a few are poor specimens, and the very small snails, particularly the Pupillidae, could not be identified without higher magnification than a hand lens, and most of these are yet to be identified.

The Baker collection was examined at the Illinois Natural History Survey, and the data were recorded for all specimens from the southernmost eleven counties (Figure 7). The recent survey data were compiled and compared with the Baker collection records (Figure 8). This collection will be offered to the Illinois Natural History Survey for permanent storage.

Results

During the period April, 1980 through July, 1989, 215 snail collections from 58 sites were preserved and labeled (Figure 1). Using Baker's classification, about 42 species and subspecies have been tentatively identified. Several specimens, particularly species of the very small Pupillidae, remain unidentified.

Snails were not found at every site that was searched. Few were found in the dry-mesic upland forest habitat typical of the sandstone region of the Shawnee Hills. Old growth post oak flatwoods on the till plain (natural areas on the Crab Orchard Wildlife Refuge, Williamson Co.) were searched rather thoroughly, and none were found. Snails are apparently rare in that habitat. They do not appear to be abundant in the extensive bottomland forest communities of the Cache River basin. Very few land snails were observed in swamps, although aquatic species are locally abundant.

Snails appear to be most abundant in the limestone regions, either in mesic forested ravines or on dry limestone glades. Some disturbed habitats, such as abandoned limestone quarries, have large numbers and a good diversity of species.

Figure 8 summarizes and compares the collection data from Baker (1939), Hubricht (1985), and this study.

Discussion and recommendations for future work

Because snails move slowly, are relatively defenseless against fires, flooding, chemical spraying, and rapid changes in

vegetative cover, range over a small area, are primarily herbivores, and prefer specific types of food and habitat, it is suspected that they may be good indicators of unnatural changes in the environment. During this study, the effects of fire were particularly obvious at natural area sites intentionally burned as a part of the current management for glade and prairie vegetation. Early spring burns at Cave Creek Glade, Simpson Township Glade, Ozark Hill Prairies, and Pine Hills left literally hundreds of shells from roasted snails scattered over the surface. Rotted logs, limbs, and old stumps where most of the snails were concentrated at that time of the year were spots that burned the hottest. Such calamities would have happened during natural fires prior to settlement, but protected sites are often "islands" on a generally disturbed landscape today, and if any species is wiped out at an area, there may be no adjoining populations to restock the site. Research is needed particularly to study and monitor the long term and short term effects of fire upon snail populations. We must know just how restricted certain species are to specific habitats.

Heavy rainfall and drastically fluctuating water levels in floodplains occasionally affects snails. Dead snails that appeared to be drowned were found along a drainageway at Ozark Hills Nature Preserve the day following a storm and temporary flooding of the ravine. Unnatural drainage changes have probably wiped out local populations in the past.

Certainly, the destruction and changes in vegetative cover have affected snails. Those snails that prefer particular plant species for food or cover would, of course, be subject to the same disturbances that affect the plant. Dr. Baker (1939) mentions that railroad rights of ways across the prairie regions of Illinois may be places of refuge for species driven from the natural grasslands by civilization. He also mentions that certain snail species were found in mature woodlands, whereas different species were more common in cut-over forest stands. There were not enough collections in this survey to determine just how restricted particular snail species were to vegetative types, but the limestone glades appeared to have several species that were observed nowhere else. An obvious problem in determining where snails occur and where they are absent is the difficulty of finding snails in certain habitats. Shells are much easier to see on sites where bare soil and rock are exposed than in thick vegetation or in the deep leaf litter of many forest communities. More work is needed to document the relationships between snail species and vegetation and community types.

Using Dr. Baker's manual and collection as references, the observations and collections of this survey indicate some changes in species occurrence and abundance between the 1930's and 1980's (see Figure 8), but not enough is known about Dr. Baker's

collecting techniques to make statistically valid comparisons. Neither was information found to document sites where Dr. Baker searched but found no snails. Comparisons are also difficult, because 1) several of the very small shells collected in this survey are not yet identified, and 2) there is confusion because of taxonomic changes--some of the rare subspecies listed by Baker are not recognized by Hubricht and other recent malacalogists. The following species are noted as uncommon or rare in the state (not just in the south eleven counties) according to Baker (1939) and Hubricht (1985), and further study is recommended to document those that should be considered as threatened or endangered:

- Cochlicopa lubrica
- Vallonia parvula
- Gastrocopta procera
- G. holzingeri
- G. abbreviata
- Megapallifera ragsdale
- Anguispira strongylodes
- Helicodiscus notius notius
- Mesomphix globosus
- Mesomphix cupreus (name may be changed since Baker, 1939)
- Paravitrea significans (probably not in southern Illinois)
- P. capsella
- Zonitoides limatulus
- Striatura meridionalis
- S. milium
- Euconulus dentatus
- Guppya sterkii
- Rabdotus dealbatus dealbatus
- Polygyra dorfeuilliana
- Stenotrema stenotrema
- Stenotrema hubrichti (of federal concern)
- Triodopsis denotata
- T. obstricta

Of the above, only Stenotrema hubrichti was collected (and identified) in this survey. This is a species recently reviewed by The Nature Conservancy for federal listing, because Union Co., Illinois is the only recorded locality. The Mesomphix cupreus listed by Baker and identified as a common species in this survey must not be the same as the M. cupreus listed by Hubricht. One species, the Iowa pleistocene snail (Discus macclintocki), is currently listed as endangered in Illinois. It has been recently found in the northwest corner of the state and is associated with cool slopes.

Summary

Based upon comparisons with Baker's work in the 1930's, it is likely that snails, in general, are less common today than they were 50 years ago. Although conditions and collecting

techniques vary too much to make accurate assumptions based on numbers collected, many of the Baker collecting vials contain more shells of a particular species than were observed during the total time of this study.

Snails are potentially good indicators of environmental changes, but more base line data is needed to accurately monitor populations. Good species lists are needed for each community type in all of our protected natural areas.

Natural area managers should consider the effects of fire, vegetation clearing, and chemicals upon snails before making decisions regarding use, time of year, and extent of manipulation. Sites should be examined following management applications to note snail mortality. Techniques for estimating numbers should be developed to monitor population changes.

There are several potential snail candidates for the endangered and threatened species list. Each of these should be studied further.

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FIGURE 1.

LAND SNAIL COLLECTION NUMBERS, SPECIES, AND LOCALITIES
Max D. Hutchison, 1980-89

1 - Mesomphix cupreus ... Johnson Co., Simpson Twp. Hill Pr
2 - Polygyra inflecta ... Johnson Co., Simpson Twp. Hill Pr
3 - Polygyra thyroidus ... Union Co., Atwood Ridge
4 - Polygyra fosteri ... Alexander Co., Ozark Hill Prairies
5 - Polygyra albolabris dentata ... Alexander Co., Ozark HP
6 - Polygyra profunda (fossil) ... Alexander Co., Ozark HP
7 - (unidentified) fossil sp. ... Alexander Co., Ozark HP
8 - Mesomphix cupreus ... Alexander Co., Ozark HP
9 - Polygyra inflecta ... Union Co., Berryville Shale Glade
10 - Zonitoides nitidus ... Union Co., Berryville Shale Glade
11 - Polygyra fraudulenta ... Union Co., Berryville Shale Glad
12 - Mesomphix cupreus ... Johnson Co., Simpson Twp. Hill Pr
13 - Haplotrema concavum ... Johnson Co., Simpson Twp. Hill Pr
14 - Polygyra thyroidus ... Johnson Co., Simpson Twp. Hill Pr
15 - Mesomphix perlaevis vulgatus ... Hardin Co., Panther Hol
16 - Polygyra tridentata tridentata ... Hardin Co., Panther Ho
17 - Retinella indentata ... Hardin Co., Panther Hollow
18 - Haplotrema concavum ... Hardin Co., Panther Hollow
19 - Mesomphix cupreus ... Monroe Co., Fults Hill Prairie
20 - Polygyra fosteri ... Monroe Co., Fults Hill Prairie
21 - Polygyra albolabris dentata ... Union Co., Atwood Ridge
22 - Haplotrema concavum ... Pope Co., Leisure City
23 - Mesomphix cupreus ... Pope Co., Leisure City
24 - Polygyra thyroidus ... Johnson Co., Belknap
25 - Polygyra inflecta ... Johnson Co., Belknap
26 - Haplotrema concavum ... Hardin Co., Whoopie Cat Mtn
27 - Polygyra tridentata frisoni ... Johnson Co., Indian Pt
28 - Mesomphix cupreus ... Johnson Co., Indian Point
29 - Polygyra leporina ... Hardin Co., Shetlerville
30 - Polygyra fosteri ... Hardin Co., Shetlerville
31 - Retinella indentata ... Johnson Co., near Heron Pond
32 - Retinella sp. ... Johnson Co., near Heron Pond
33 - Polygyra inflecta ... Johnson Co., near Heron Pond
34 - Polygyra fraterna fraterna ... Pope Co., Leisure City
35 - Planorbis trivolvis ... Johnson Co., Heron Pond
36 - unidentified sp. ... Pope Co., Reddick Hollow
37 - Polygyra fraudulenta ... Pope Co., Wallace Bluff
38 - Mesomphix perlaevis vulgatus ... Hardin Co., Whoopie Cat
39 - Mesomphix perlaevis vulgatus ... Hardin Co., Shetlerville
40 - Retinella sp. ... Johnson Co., Wildcat Bluff
41 - Polygyra fosteri ... Saline Co., Eldorado
42 - Polygyra tridentata frisoni ... Hardin Co., Shetlerville
43 - Ventridens ligerus ... Johnson Co., near Heron Pond
44 - Polygyra clausa ... Johnson Co., Lower Cache, Rt 37
45 - Mesomphix perlaevis vulgatus ... Hardin Co., Whoopie Cat
46 - Polygyra tridentata frisoni ... Hardin Co., Cave in Rock
47 - Mesomphix perlaevis vulgatus ... Hardin Co., Whoopie Cat
48 - Polygyra clausa ... Johnson Co., near Heron Pond

49 - Haplotrema concavum ... Johnson Co., near Heron Pond
50 - Vivipara sp. ... Pulaski Co., Lower Cache, Sec. 8
51 - Polygyra clausa ... Massac Co., Round Knob, I-24
52 - Polygyra tridentata frisoni ... Massac Co., Joppa
53 - Mesomphix perlaevis vulgatus ... Massac Co., Joppa
54 - Polygyra clausa ... Massac Co., Joppa
55 - Haplotrema concavum ... Pulaski Co., Chestnut Hills
56 - Polygyra inflecta ... Union Co., Atwood Ridge
57 - Mesomphix perlaevis vulgatus ... Union Co., Atwood Ridge
58 - Mesomphix perlaevis vulgatus ... Hardin Co., Whoopie Cat
59 - Retinella indentata ... Johnson Co., Wildcat Bluff
60 - Polygyra thyroidus ... Johnson Co., Wildcat Bluff
61 - Polygyra thyroidus ... Hardin Co., Whoopie Cat Mtn
62 - Polygyra albolabris alleni ... Pope Co., Gyp Williams Hol
63 - Polygyra albolabris alleni ... Massac Co., Halesia NP
64 - Paravitrea capsella ... Massac Co., Halesia NP
65 - Polygyra albolabris alleni ... Massac Co., Halesia NP
66 - Polygyra thyroidus ... Massac Co., Halesia NP
67 - Polygyra thyroidus ... Alexander Co., Horseshoe Island
68 - Polygyra inflecta ... Union Co., Pine Hills
69 - Polygyra fosteri ... Alexander Co, Clear Creek Swamp
70 - Mesomphix perlaevis vulgatus ... Johnson Co., Heron Pond
71 - Mesomphix perlaevis vulgatus ... Hardin Co., Panther Hol
72 - Zonitoides arboreus ... Union Co., Berryville Shale Glade
73 - Polygyra inflecta inflecta ... Hardin Co., Panther Hollow
74 - Polygyra sp. ... Johnson Co., near Heron Pond
75 - Haplotrema concavum ... Johnson Co., Heron Pond-LBS
76 - Polygyra inflecta ... Johnson Co., Heron Pond-LBS
77 - Polygyra leporina ... Johnson Co., Heron Pond-LBS
78 - Polygyra thyroidus ... Johnson Co., Heron Pond-LBS
79 - Mesomphix friabilis ... Johnson Co., Heron Pond-LBS
80 - Polygyra fosteri ... Jackson Co., Fern Rocks NP
81 - Anguispira alternata carinata ... Jackson Co., Fern Rocks
82 - Polygyra inflecta ... Johnson Co., near Heron Pond
83 - Polygyra clausa ... Jackson Co., Fern Rocks NP
84 - Polygyra inflecta ... Jackson Co., Fern Rocks NP
85 - Discus patulus ... Jackson Co., Fern Rocks NP
86 - Mesomphix friabilis ... Johnson Co., Heron Pond
87 - Mesomphix perlaevis vulgatus ... Pope Co., Werner Tract
88 - Polygyra thyroidus ... Pope Co., Azotus, Dean Cem East
89 - Viviparidae sp. ... Johnson Co., near Heron Pond
90 - Lymnaea palustris ... Alexander Co., Clear Creek Swamp
91 - Polygyra tridentata frisoni ... Johnson Co., Indian Point
92 - Haplotrema concavum ... Johnson Co., Indian Point
93 - Polygyra fosteri ... Johnson Co., Indian Point
94 - Mesomphix perlaevis vulgatus ... Johnson Co., Indian Pt
95 - Deroceras gracile ... Jackson Co., S end Fountain Bluff
96 - Haplotrema concavum ... Jackson Co., S end Fountain Bluff
97 - Polygyra inflecta media ... Jackson Co., Fountain Bluff
98 - Polygyra inflecta ... Jackson Co., S end Fountain Bluff
99 - Polygyra fraterna ... Jackson Co., S end Fountain Bluff
100 - Ventridens sp. ... Jackson Co., S end Fountain Bluff

101a - unknown sp. ... Jackson Co., S end Fountain Bluff
101b - Deroceras gracile ... Johnson Co., Bird Spring
102 - Haplotrema concavum ... Johnson Co., Bird Spring
103 - Mesomphix cupreus ... Johnson Co., Bird Spring
104 - Mesomphix perlaevis vulgatus ... Johnson Co., Bird Spring
105 - Polygyra thyroidus ... Johnson Co., Bird Spring
106 - Polygyra clausa ... Johnson Co., Bird Spring
107 - Polygyra inflecta inflecta ... Johnson Co., Bird Spring
108 - Polygyra fraudulenta ... Johnson Co., Bird Spring
109 - Polygyra albolabris dentata ... Johnson Co., Bird Spring
110 - unknown sp. ... Johnson Co., Bird Spring
111 - Pallifera fosteri ... Johnson Co., Bird Spring
112 - Polygyra tridentata edentilabris ... Johnson Co., Belknap
113 - Polygyra inflecta inflecta ... Johnson Co., Belknap Qry
114 - Haplotrema concavum ... Johnson Co., Belknap Quarry
115 - Mesomphix perlaevis vulgatus ... Johnson Co., Belknap Qry
116 - Polygyra thyroidus ... Johnson Co., Belknap Quarry
117 - Polygyra tridentata frisoni ... Johnson Co., Belknap Qry
118 - unidentified sp. ... Johnson Co., Belknap Quarry
119 - Polygyra inflecta inflecta ... Johnson Co., Vienna
120 - unknown sp. ... Johnson Co., Vienna
121 - Ventridens ligerus ... Johnson Co., Vienna
122 - unknown sp. ... Johnson Co., Vienna
123 - Zonitoides arboreus ... Johnson Co., Wise Ridge
124 - Polygyra tridentata ... Jackson Co., Horseshoe Bluff
125 - Polygyra profunda (fossil) ... Jackson Co., Horseshoe Bf
126 - Mesomphix friabilis ... Johnson Co., Cave Cr Glade NP
127 - Discus patulus ... Johnson Co., Cave Creek Glade NP
128 - Polygyra inflecta ... Johnson Co., Cave Creek Glade NP
129 - Mesomphix cupreus ... Johnson Co., Cave Creek Glade NP
130 - Polygyra fraudulenta ... Johnson Co., Cave Creek Glade
131 - Polygyra elevata ... Johnson Co., Cave Creek Glade NP
132 - Haplotrema concavum ... Johnson Co., Cave Creek Glade NP
133 - Polygyra thyroidus ... Johnson Co., Cave Creek Glade NP
134 - Polygyra fosteri ... Johnson Co., Cave Creek Glade NP
135 - unknown sp. ... Johnson Co., Cave Creek Glade NP
136 - unknown sp. ... Johnson Co., Cave Creek Glade NP
137 - unknown sp. ... Johnson Co., Cave Creek Glade NP
138 - Mesomphix perlaevis vulgatus ... Pope Co., Pleasant Val
139 - Anguispira alternata carinata ... Union Co., Pine Hills
140 - Haplotrema concavum ... Union Co., Pine Hills
141 - Polygyra fraudulenta ... Union Co., Pine Hills
142 - Polygyra albolabris dentata ... Union Co., Pine Hills
143 - Polygyra thyroidus ... Union Co., Pine Hills
144 - Mesomphix perlaevis vulgatus ... Union Co., Pine Hills
145 - Zonitoides arboreus ... Union Co., Pine Hills
146 - Zonitoides sp. ... Union Co., Pine Hills
147 - unidentified sp. ... Union Co., Pine Hills
148 - unidentified sp. ... Union Co., Pine Hills
149 - unidentified sp. ... Union Co., Pine Hills
150 - Stenotrema hubrichti ... Union Co., Pine Hills
151 - Hawaiia minuscula ... Union Co., Pine Hills

152 - Gastrocopta corticaria ... Union Co., Pine Hills
153 - unidentified sp. ... Union Co., Pine Hills
154 - Polygyra albolabris dentata ... Union Co., Pine Hills
155 - unidentified sp. ... Union Co., Pine Hills
156 - unidentified sp. ... Union Co., Pine Hills
157 - Mesomphix perlaevis vulgatus ... Union Co., Pine Hills
158 - Mesomphix sp. ... Johnson Co., Simpson Twp. Hill Pr
159 - Zonitoides arboreus ... Johnson Co., Simpson Twp. Hill
160 - Retinella indentata ... Johnson Co., Simpson Twp. Hill
161 - Retinella sp. ... Johnson Co., Simpson Twp. Hill Pr
162 - Discus patulus ... Johnson Co., Simpson Twp. Hill Pr
163 - Polygyra inflecta inflecta ... Johnson Co., Simpson Twp.
164 - Gastrocopta sp. ... Johnson Co., Simpson Twp. Hill Pr
165 - Polygyra fosteri ... Union Co., Opossum Trot Trail
166 - Polygyra fosteri ... Johnson Co., Cedar Bluff
167 - Haplotrema concavum ... Johnson Co., Cave Creek Glade
168 - Polygyra inflecta inflecta ... Johnson Co., Cave Creek Gl
169 - Polygyra fraudulenta ... Johnson Co., Cave Creek Glade
170 - Polygyra thyroidus ... Johnson Co., Cave Creek Glade
171 - Mesomphix perlaevis vulgatus ...Johnson Co., Cave Creek
172 - Mesomphix friabilis ... Johnson Co., Cave Creek Glade
173 - Discus patulus ... Johnson Co., Cave Creek Glade
174 - Anguispira alternata carinata ... Johnson Co., Cave Creek
175 - Zonitoides arboreus ... Johnson Co., Cave Creek Glade
176 - Zonitidae sp. ... Johnson Co., Cave Creek Glade
177 - Retinella indentata ... Johnson Co., Cave Creek Glade
178 - Retinella sp. ... Johnson Co., Cave Creek Glade
179 - Strobilops labyrinthica ... Johnson Co., Cave Creek Glade
180 - Pupilidae sp. ... Johnson Co., Cave Creek Glade
181 - Physa gyrina ... Johnson Co., Heron Pond-LBS
182 - Haplotrema concavum ... Union Co., Ozark Hills NP
183 - Polygyra albolabris alleni ... Union Co., Ozark Hills NP
184 - Haplotrema concavum ... Johnson Co., Heron Pond-LBS
185 - Polygyra thyroidus ... Johnson Co., Heron Pond-LBS
186 - Polygyra albolabris dentata ... Johnson Co., Heron Pond
187 - Zonitidae sp. ... Johnson Co., Heron Pond-LBS
188 - Polygyra hirsuta ... Johnson Co., Heron Pond-LBS
189 - Polygyra thyroidus ... Johnson Co., near Heron Pond
190 - Polygyra appressa ... Randolph Co., Swayne Hollow
191 - Polygyra fosteri ... Randolph Co., Swayne Hollow
192 - Zonitidae sp. ... Johnson Co., near Heron Pond
193 - Hawaiia minuscula ... Johnson Co., near Goreville
194 - Retinella indentata ... Johnson Co., near Goreville
195 - Pupillidae sp. ... Johnson Co., near Goreville
196 - Polygyra inflecta inflecta ... Johnson Co., Goreville
197 - Zonitoides arboreus ... Johnson Co., near Goreville
198 - Polygyra inflecta inflecta ... Union Co., Berryville SG
199 - Polygyra appressa ... Jackson Co., Devil's Backbone
200 - Polygyra clausa ... Jackson Co., Devil's Backbone
201 - Mesomphix perlaevis vulgatus ... Jackson Co., D Backbone
202 - Zonitoides arboreus ... Jackson Co., Devil's Backbone
203 - unidentified sp. ... Jackson Co., Devil's Backbone

204 - Polygyra inflecta inflecta ... Jackson Co., D Backbone
205 - Polygyra fraterna ... Jackson Co., Devil's Backbone
206 - Polygyra fraudulenta ... Union Co., Bald Knob
207 - Zonitidae sp. ... Union Co., Bald Knob
208 - Haplotrema concavum ... Union Co., Berryville Shale Glade
209 - Polygyra inflecta inflecta ... Union Co., Berryville SG
210 - Polygyra tridentata ... Union Co., Berryville Shale Glade
211 - Polygyra tridentata ... Union Co., Bald Knob
212 - Deroceras gracile ... Johnson Co., near Goreville
213 - Polygyra inflecta inflecta ... Johnson Co., Goreville
214 - unidentified sp. ... Johnson Co., near Goreville

FIGURE 2.
LAND SNAIL SPECIES AND COLLECTION NUMBERS
Max D. Hutchison, 1980-81

Anguispira alternata carinata - #81, #139, #174
Anguispira alternata alternata -
Deroceras gracile - #95, #101b, #212
Discus patulus - #85, #127, #162, #173
Gastrocopta corticaria - #152
Gastrocopta sp. - #164
Haplotrema concavum - #13, #18, #22, #26, #49, #55, #75, #92, #96, #102, #114, #132, #140, #167, #182, #184, #208
Hawaiia minuscula - #151, #193
Lymnaea palustris - #90
Mesomphix cupreus - #1, #8, #12, #19, #23, #28, #103, #129
Mesomphix friabilis - #79, #86, #126, #172
Mesomphix perlaevis vulgatus - #15, #38, #39, #45, #47, #53, #57, #58, #70, #71, #87, #94, #104, #115, #138, #144, #157, #171, #201
Mesomphix sp. - #158
Pallifera fosteri - #111
Paravitrea capsella - #64
Physa gyrina - #181
Physa heterostropha -
Planorbis trivolvis - #35
Polygyra albolabris alleni - #62, #63, #65, #183
Polygyra albolabris dentata - #5, #21, #109, #142, #154, #186
Polygyra appressa - #190, #199
Polygyra clausa - #44, #48, #51, #54, #83, #106, #200
Polygyra elevata - #131
Polygyra fosteri - #4, #20, #30, #41, #69, #80, #93, #134, #165, #166, #191
Polygyra fraterna - #99, #205
Polygyra fraterna fraterna - #34
Polygyra fraudulenta - #11, #37, #108, #130, #141, #169, #206
Polygyra hirsuta - #188
Polygyra inflecta - #2, #9, #25, #33, #56, #68, #76, #82, #84, #98, #128
Polygyra inflecta inflecta - #73, #107, #113, #119, #163, #168, #196, #198, #204, #209, #213
Polygyra inflecta media - #97
Polygyra leporina - #29, #77
Polygyra profunda (fossil) - #6, #125
Polygyra thyroidus - #3, #14, #24, #60, #61, #66, #67, #78, #88, #105, #116, #133, #143, #170, #185, #189
Polygyra tridentata - 124, #210, #211
Polygyra tridentata edentilabris - #112
Polygyra tridentata frisoni - #27, #42, #46, #52, #91, #117
Polygyra tridentata tridentata - #16
Polygyra sp. - #74
Pupillidae sp. - #180, #195
Retinella indentata - #17, #31, #59, #160, #177, #194

Retinella sp. - #32, #40, #161, #178
Stenotrema hubrichti - #150
Strobilops labyrinthica - #179
Ventridens ligerus - #43, #121
Ventridens sp. - #100
Vivipara sp. - #50
Viviparidae sp. - #89
Zonitoides arboreus - #72, #123, #145, #159, #175, #197, #202
Zonitoides nitidus - #10
Zonitoides sp. - #146, #176
Zonitidae sp. - #187, #192, #207
fossil sp. - #7
unidentified sp. - #36, #101a, #110, #118, #120, #122, #135, #136, #137, #147, #148, #149, #153, #155, #156, #203, #214

FIGURE 3.

LAND SNAIL COLLECTING SITE DESCRIPTIONS AND SPECIES LIST PER SITE
Max D. Hutchison, 1980-89

Alexander Co., Clear Creek Swamp (NAI #309)
wet floodplain forest, flooded oak woods

- Lymnaea palustris (#90)

Alexander Co., near Clear Creek Swamp (NAI #309)
cypress swamp on E. side of Clear Creek

- Polygyra fosteri (#69)

Alexander Co., Horseshoe Lake Island (NAI #375)
mesic floodplain forest, on decaying log

- Polygyra thyroidus (#67)

Alexander Co., Ozark Hill Prairies (NAI #509)
loess hill prairie

- Polygyra fosteri (#4)
- Polygyra albolabris dentata (#5)
- Polygyra profunda (fossil) (#6)
- unidentified fossil species (#7)
- Mesomphix cupreus (#8)

Alexander Co., Opossum Trot Trail (NAI #310)
dry upland forest on deep loess

- Polygyra fosteri (#165)

Hardin Co., Panther Hollow (NAI #949)
dry-mesic forest, on N-facing slope with many sandstone boulders

- Mesomphix perlaevis vulgatus (#15), (#71)
- Polygyra tridentata tridentata (#16)
- Retinella indentata (#17)
- Haplotrema concavum (#18)
- Polygyra inflecta inflecta (#73)

Hardin Co., Whoopie Cat Mountain (NAI #325)

limestone glade, N. edge of Whoopie Cat Lake

- Haplotrema concavum (#26)
- Mesomphix perlaevis vulgatus (#38), (#45), (#47), (#58)
- Polygyra thyroidus (#61)

Hardin Co., Shetlerville, abandoned limestone quarry
weedy, disturbed site with limestone gravels and boulders

- Polygyra leporina (#29)
- Polygyra fosteri (#30)
- Mesomphix perlaevis vulgatus (#39)
- Polygyra tridentata frisoni (#42)

Hardin Co., Victory Mine, NW of Cave in Rock
disturbed site with limestone gravels and boulders

- Polygyra tridentata frisoni (#46)

Jackson Co., Giant City, Fern Rocks NP (NAI #958)
dry-mesic forest, along sandstone bluff

- Polygyra fosteri (#80)
- Anguispira alternata carinata (#81)

Jackson Co., Giant City, Fern Rocks NP (NAI #958)
dry-mesic forest, among sandstone boulders along stream

- Polygyra clausa (#83)
- Polygyra inflecta (#84)
- Discus patulus (#85)

Jackson Co., Fountain Bluff, south end
dry-mesic forest, along slope with limestone and sandstone outcrops and boulders

- Deroceras gracile (#95)
- Haplotrema concavum (#96)
- Polygyra inflecta media (#97)
- Polygyra inflecta (#98)
- Polygyra fraterna (#99)
- Ventridens sp. (#100)
- unknown sp. (#101a)

Jackson Co., E of Grand Tower, Horseshoe Bluff (NAI #956)

dry-mesic forest on top of sandstone bluff

- Polygyra tridentata (#124)
- Polygyra profunda (fossil) (#125)

Jackson Co., Grand Tower, Devil's Backbone (NAI #594)
dry-mesic forest on W-facing limestone bluff

- Polygyra appressa (#199)
- Polygyra clausa (#200)
- Polygyra inflecta inflecta (#204)
- Polygyra fraterna (#205)
- Mesomphix perlaevis vulgatus (#201)
- Zonitoides arboreus (#202)
- unidentified sp. (#203)

Johnson Co., Rt. 37, Lower Cache River (NAI #610)
along roadside, in beer can

- Polygyra clausa (#44)

Johnson Co., Hutchison Farm, near Heron Pond (NAI #1059)
mowed pasture

- Ventridens ligerus (#43)
- Polygyra clausa (#48)
- Haplotrema concavum (#49)

Johnson Co., Hutchison Farm, near Heron Pond (NAI #1059)
cultivated garden

- Polygyra thyroidus (#189)

Johnson Co., Hutchison Farm, near Heron Pond (NAI #1059)
dry-mesic forest, under and around decayed logs

- Retinella indentata (#31)
- Retinella sp. (#32)
- Polygyra inflecta (#33, #82)
- Mesomphix perlaevis vulgatus (#70)
- Polygyra sp. (#74)

Johnson Co., Ridenhaur Pond, near Heron Pond (NAI #1059)
cypress swamp, on decayed cypress log

- Viviparidae sp. (#89)

Johnson Co., Forman Church, near Heron Pond (NAI #1059)
in mowed church yard

- Zonitidae sp. (#187)

Johnson Co., N. edge of Heron Pond (NAI #1059)
dry-mesic forest

- Mesomphix friabilis (#86)

Johnson Co., Burlington RR, Heron Pond (NAI #1059)
under woody debris, along RR ROW next to dry-mesic forest

- Haplotrema concavum (#75)
- Polygyra inflecta (#76)
- Polygyra leporina (#77)
- Polygyra thyroidus (#78)
- Mesomphix friabilis (#79)

Johnson Co., Wildcat Bluff (NAI #1059)
limestone glade

- Retinella indentata (#59)
- Polygyra thyroidus (#60)
- Retinella sp. (#40)

Johnson Co., Heron Pond (NAI #1059)
cypress swamp, on decayed cypress stump

- Planorbis trivolvis (#35)

Johnson Co., Heron Pond, near Cache River (NAI #1059)
wet floodplain forest

- Physa gyrina (#181)
- Haplotrema concavum (#184)
- Polygyra thyroidus (#185)
- Polygyra albolabris dentata (#186)
- Polygyra hirsuta (#188)
- Zonitidae sp. (#187)

Johnson Co., near Belknap
soybean field

- Polygyra thyroidus (#24)
- Polygyra inflecta (#25)

Johnson Co., W. end Indian Point (NAI #27)
limestone glade

- Polygyra tridentata frisoni (#27), (#91)
- Mesomphix cupreus (#28)
- Haplotrema concavum (#92)
- Polygyra fosteri (#93)
- Mesomphix perlaevis vulgatus (#94)

Johnson Co., Simpson Twp. Hill Prairie (NAI #613)
limestone glade

- Mesomphix cupreus (#1)
- Mesomphix sp. (#158)
- Polygyra inflecta (#2)
- Polygyra inflecta inflecta (#163)
- Mesomphix cupreus (#12)
- Haplotrema concavum (#13)
- Polygyra thyroidus (#14)
- Zonitoides arboreus (#159)
- Retinella indentata (#160)
- Retinella sp. (#161)
- Discus patulus (#162)
- Gastrocopta sp. (#164)

Johnson Co., 1 mi. NE Belknap, Bird Spring (part of Heron Pond-Little Black Slough Natural Area, NAI #1059)
dry-mesic forest, slope with spring and some outcrops of limestone and sandstone

- Deroceras gracile (#101b)
- Haplotrema concavum (#102)
- Mesomphix cupreus (#103)
- Mesomphix perlaevis vulgatus (#104)
- Polygyra thyroidus (#105)
- Polygyra clausa (#106)
- Polygyra inflecta inflecta (#107)
- Polygyra fraudulenta (#108)
- Polygyra albolabris dentata (#109)
- unknown sp. (#110)
- Pallifera fosteri (#111)

Johnson Co., 1/2 mi. NE Belknap, Quarry (part of Heron Pond-Little Black Slough Natural Area, NAI #1059)
dry-mesic forest and among boulders on S-facing slope at

abandoned limestone quarry

- Polygyra tridentata edentilabris (#112)
- Polygyra inflecta inflecta (#113)
- Haplotrema concavum (#114)
- Mesomphix perlaevis vulgatus (#115)
- Polygyra thyroidus (#116)
- Polygyra tridentata frisoni (#117)
- unidentified spp. (#118)

Johnson Co., Vienna, yard of Hutchison home
under steps on north side of house

- Polygyra inflecta inflecta (#119)
- unknown sp. (#120)
- Ventridens ligerus (#121)
- unknown sp. (#122)

Johnson Co., W of Goreville, yard of Robert Craig residence
under sandstone rocks and blocks of wood

- Hawaiia minuscula (#193)
- Retinella indentata (#194)
- Polygyra inflecta inflecta (#196, #213)
- Zonitoides arboreus (#202)
- Pupillidae sp. (#195)

Johnson Co., New Burnside, Wise Ridge (NAI #60)
small limestone glade

- Zonitoides arboreus (#123)

Johnson Co., 4 mi. S of Vienna, Cave Creek Glade (NAI #360)
limestone glade and surrounding dry forest

- Anguispira alternata carinata (#174)
- Mesomphix friabilis (#126, #172)
- Discus patulus (#127, #173)
- Polygyra inflecta (#128)
- Polygyra inflecta inflecta (#168)
- Mesomphix cupreus (#129)
- Mesomphix perlaevis vulgatus (#171)
- Polygyra fraudulenta (#130, #169)
- Polygyra elevata (#131)
- Haplotrema concavum (#132, #167)
- Polygyra thyroidus (#133, #170)
- Polygyra fosteri (#134)
- Retinella indentata (#177)

- Retinella sp. (#178)
- Stobilops labyrinthica (#179)
- Zonitoides arboreus (#175)
- Zonitidae sp. (#176)
- Pupillidae sp. (#180)
- unknown sp. (#135)
- unknown sp. (#136)
- unknown sp. (#137)

Johnson Co., SW of Goreville, Cedar Bluff (NAI #359)
dry-mesic forest at base of SS cliff

- Polygyra fosteri (#166)

Massac Co., I-24 near Round Knob
highway ROW, mowed fescue

- Polygyra clausa (#51)

Massac Co., Cook Coal Terminal, Halesia NP (NAI #753)
dry-mesic forest near Ohio River

- Polygyra albolabris alleni (#63), (#65)
- Paravitrea capsella (#64)
- Polygyra thyroidus (#66)

Massac Co., near Joppa
tall weeds along Ohio River bank

- Polygyra tridentata frisoni (#52)
- Mesomphix perlaevis vulgatus (#53)
- Polygyra clausa (#54)

Monroe Co., Fults Hill Prairie (NAI #1045)
limestone bluff

- Mesomphix cupreus (#19)
- Polygyra fosteri (#20)

Pope Co., Leisure City (NAI #808)
limestone glade

- Polygyra fraterna fraterna (#34)
- Haplotrema concavum (#22)
- Mesomphix cupreus (#23)

Pope Co., Reddick Hollow (NAI #336)
dry-mesic forest, sandstone slope

- unidentified sp. (#36)

Pope Co., Wallace Bluff
sandstone shelter

- Polygyra fraudulenta

Pope Co., Gyp Williams Hollow (NAI #1027)
dry-mesic forest

- Polygyra albolabris alleni (#62)

Pope Co., near Azotus, Dean Cemetery East
barrens

- Polygyra thyroidus (#88)

Pope Co., near Waltersburg, Werner Tract (NAI #337)
limestone glade

- Mesomphix perlaevis vulgatus (#87)

Pope Co., NW of Golconda, Pleasant Valley Glade (NAI #803)
limestone glade

- Mesomphix perlaevis vulgatus (#138)

Pulaski Co., Lower Cache, Section 8 Woods (NAI #610)
cypress swamp

- Vivipara sp. (#50)

Pulaski Co., near Olmsted, Chestnut Hills (NAI #944)
dry-mesic forest in gravels along Ohio River bluffs

- Haplotrema concavum (#55)

Randolph Co., SW of Campbell Hill, Swayne Hollow (NAI #827)
dry to mesic forest along SS cliffs

- Polygyra appressa (#190)
- Polygyra fosteri (#191)

Saline Co., near Eldorado, church camp
mowed lawn

- Polygyra fosteri (#41)

Saline Co., Cave Hill (NAI #243)
sandstone glade

- Mesomphix perlaevis vulgatus (#157)

Union Co., Berryville Shale Glade (NAI #854)
shale glade

- Polygyra inflecta (#9)
- Polygyra inflecta inflecta (#198, #209)
- Polygyra tridentata (#210)
- Zonitoides nitidus (#10)
- Polygyra fraudulenta (#11)
- Zonitoides arboreus (#72)
- Haplotrema concavum (#208)

Union Co., Atwood Ridge (NAI #1046)
mesic ravine forest

- Polygyra thyroidus (#3)

Union Co., Atwood Ridge (NAI #1046)
dry forest, limestone slope

- Polygyra albolabris dentata (#21)

Union Co., Atwood Ridge (NAI #1046)
loess hill prairie

- Polygyra inflecta (#56)
- Mesomphix perlaevis vulgatus (#57)

Union Co., Pine Hills (NAI #1079)
limestone bluff

- Polygyra inflecta (#68)
- Anguispira alternata carinata (#139)

- Haplotrema concavum (#140)
- Polygyra fraudulenta (#141)
- Polygyra albolabris dentata (#142, #154)
- Polygyra thyroidus (#143)
- Mesomphix perlaevis vulgatus (#144)
- Zonitoides arboreus (#145)
- Zonitoides sp. (#146)
- unidentified sp. (#147)
- unidentified sp. (#148)
- unidentified sp. (#149)
- Stenotrema hubrichti (#150)
- Hawaiia minuscula (#151)
- Gastrocopta corticaria (#152)
- unidentified sp. (#153)
- unidentified sp. (#155)
- unidentified sp. (#156)

Union Co., Ozark Hills Nature Preserve (NAI #856)
mesic ravine forest with cherty limestone outcropping

- Haplotrema concavum (#182)
- Polygyra albolabris alleni (#183)

Union Co., Bald Knob (NAI #862)
dry-mesic forest on upper slopes of high hill

- Polygyra fraudulenta (#206)
- Polygyra tridentata (#211)
- Zonitidae sp. (#207)

FIGURE 4.

LAND SNAIL COLLECTING SITES AND COMMUNITY TYPES
Max D. Hutchison, 1980-89

locality	community type
Alexander Co., Clear Creek Swamp -	wet floodplain forest
Alexander Co., near Clear Creek Swamp -	cypress swamp
Alexander Co., Horseshoe Lake Island -	mesic floodplain forest
Alexander Co., Ozark Hill Prairies -	loess hill prairie
Alexander Co., Opossum Trot Trail NA	dry upland forest
Hardin Co., Panther Hollow -	dry-mesic forest, SS slope
Hardin Co., Whoopie Cat Mountain -	limestone glade
Hardin Co., Shetlerville -	limestone quarry
Hardin Co., Victory Mine -	fluorspar mine
Jackson Co., Giant City, Fern Rocks -	dry-mesic forest, SS bluff
Jackson Co., Giant City, Fern Rocks -	dry-mesic forest
Jackson Co., Fountain Bluff -	dry-mesic forest, LS & SS slope
Jackson Co., Horseshoe Bluff -	dry-mesic forest
Jackson Co., Devil's Backbone -	dry-mesic forest, LS bluff
Johnson Co., Lower Cache River, Rt. 37 -	roadside
Johnson Co., near Heron Pond, Hutchison Farm -	pasture
Johnson Co., near Heron Pond, Hutchison Farm -	garden
Johnson Co., near Heron Pond, Hutchison Farm -	dry-mesic forest
Johnson Co., near Heron Pond, Ridenhaur Pond -	cypress swamp
Johnson Co., near Heron Pond, Forman -	church yard
Johnson Co., N. edge of Heron Pond -	dry-mesic forest
Johnson Co., Heron Pond, Burlington RR -	railroad ROW
Johnson Co., Wildcat Bluff -	limestone glade
Johnson Co., Heron Pond -	cypress swamp
Johnson Co., Heron Pond, near Cache River -	wet floodplain forest
Johnson Co., near Belknap -	soybean field
Johnson Co., W. end Indian Point -	limestone glade
Johnson Co., Simpson Twp. Hill Prairie -	limestone glade
Johnson Co., Bird Sring -	dry-mesic forest, LS & SS slope
Johnson Co., Belknap Quarry -	dry-mesic forest, LS slope
Johnson Co., Vienna -	north side of residence, in yard
Johnson Co., near Goreville -	under SS rocks in yard
Johnson Co., Wise Ridge -	limestone glade
Johnson Co., Cave Creek Glade NP -	limestone glade and dry forest
Johnson Co., Cedar Bluff, SW Goreville -	sandstone bluff
Massac Co., I-24 near Round Knob -	highway ROW
Massac Co., Cook Coal Terminal, Halesia NP -	dry-mesic forest
Massac Co., near Joppa -	Ohio River bank
Monroe Co., Fults Hill Prairie -	limestone bluff
Pope Co., Leisure City -	limestone glade
Pope Co., Reddick Hollow -	dry-mesic forest, SS slope
Pope Co., Wallace Bluff -	SS shelter
Pope Co., Gyp Williams Hollow -	dry-mesic forest
Pope Co., near Azotus, Dean Cemetery East -	barrens
Pope Co., near Waltersburg, Werner Tract -	limestone glade
Pope Co., NW Golconda, Pleasant Valley Glade -	limestone glade

Pulaski Co., Lower Cache, Section 8 Woods - cypress swamp
Pulaski Co., near Olmsted, Chestnut Hills - Ohio River bluffs
Randolph Co., Swayne Hollow - dry to mesic forest, SS cliffs
Saline Co., near Eldorado, church camp - mowed lawn
Saline Co., Cave Hill - sandstone glade
Union Co., Berryville Shale Glade - shale glade
Union Co., Atwood Ridge - mesic ravine forest
Union Co., Atwood Ridge - dry forest, limestone slope
Union Co., S. end of Atwood Ridge - loess hill prairie remnant
Union Co., Pine Hills - limestone bluff
Union Co., Ozark Hills NP - near Jonesboro - mesic ravine forest
Union Co., Bald Knob - dry-mesic forest

FIGURE 5.

SNAILS COLLECTED PER COMMUNITY TYPE AND NATURAL DIVISION
Max D. Hutchison, 1980-89

Bottomlands Section of Coastal Plain Division

wet bottomland forest; on and under logs near river
- *Physa gyrina*
- *Haplotrema concavum*
- *Polygyra thyroidus*
- *Polygyra albolabris dentata*
- *Polygyra hirsuta*
- Zonitidae sp.

mesic bottomland forest; on decaying log
- *Polygyra thyroidus*

dry-mesic bottomland forest; edge of cypress swamp
- *Mesomphix friabilis*

cultivated soybean field
- *Polygyra thyroidus*
- *Polygyra inflecta*

brushy railroad ROW through dry-mesic bottomland forest
- *Polygyra inflecta*
- *Polygyra leporina*
- *Polygyra thyroidus*
- *Mesomphix friabilis*
- *Haplotrema concavum*

weedy roadside; in beer can
- *Polygyra clausa*

cypress swamp; on decayed cypress log
- Viviparidae sp.

cypress swamp; in dry slough bed
- *Vivipara* sp.

cypress swamp; on decayed cypress stump
- *Planorbis trivolvis*

Cretaceous Hills Section of Coastal Plain Division

dry-mesic upland forest along Ohio River bank
- *Polygyra albolabris alleni*
- *Polygyra thyroidus*
- *Paravitrea thyroidus*

dry-mesic upland forest; in gravels along Ohio River bank

Haplotrema concavum

tall weeds and eroded site along Ohio River bank
Polygyra tridentata frisoni
Polygyra clausa
Mesomphix perlaevis vulgatus

dry-mesic barrens; in brush and grasses
Polygyra thyroidus

Lesser Shawnee Hills Section of Shawnee Hills Division

limestone glade
Anguispira alternata carinata
Polygyra fraterna fraterna
Polygyra fraudulenta
Polygyra elevata
Haplotrema concavum (5)
Mesomphix friabilis
Mesomphix perlaevis vulgatus (5)
Polygyra thyroidus (4)
Polygyra fosteri (2)
Retinella indentata (3)
Retinella sp. (3)
Polygyra tridentata frisoni
Mesomphix cupreus (4)
Mesomphix sp.
Polygyra inflecta (2)
Polygyra inflecta inflecta (2)
Zonitoides arboreus (2)
Discus patulus (2)
Gastrocopta sp.
Stobilops labyrinthica
Zonitidae sp.
Pupillidae sp.
unidentified species

abandoned limestone quarry; rocky, weedy, disturbed site
Polygyra leporina
Polygyra fosteri
Polygyra tridentata frisoni (2)
Polygyra tridentata edentilabris
Polygyra inflecta inflecta
Haplotrema concavum
Polygyra thyroidus
Mesomphix perlaevis vulgatus (2)
unidentified species

abandoned fluorspar mine; rocky disturbed site
Polygyra tridentata frisoni

mowed pasture
- Ventridens ligerus
- Polygyra clausa
- Haplotrema concavum

cultivated garden
- Polygyra thyroidus

mowed lawn
- Zonitidae sp.
- Polygyra inflect inflecta
- Ventridens ligerus
- unidentified species

dry-mesic upland forest; under and around decaying logs
- Polygyra inflecta
- Polygyra sp.
- Mesomphix perlaevis vulgatus
- Retinella indentata
- Retinella sp.

dry-mesic upland forest; rocky, N-facing, limestone and sandstone slope

- Deroceras gracile
- Haplotrema concavum
- Mesomphix cupreus
- Mesomphix perlaevis vulgatus
- Polygyra thyroidus
- Polygyra clausa
- Polygyra inflecta inflecta
- Polygyra fraudulenta
- Polygyra albolabris dentata
- Pallifera fosteri
- unidentified species

Greater Shawnee Hills Section of Shawnee Hills Division

limestone glade
- Zonitoides arboreus

sandstone glade
- Mesomphix perlaevis vulgatus

dry-mesic upland forest; rocky, N-facing, sandstone slope
- Polygyra tridentata tridentata
- Polygyra inflecta inflecta
- Mesomphix perlaevis vulgatus
- Haplotrema concavum
- Retinella indentata

dry-mesic upland forest; along sandstone bluff
- Polygyra fosteri (2)
- Polygyra fraudulenta
- Polygyra albolabris alleni
- Anguispira alternata carinata

dry-mesic upland forest; along rocky (sandstone) stream
- Polygyra clausa
- Polygyra inflecta
- Discus patulus

dry-mesic upland forest; rocky (sandstone and limestone), S-facing slope
- Deroceras gracile
- Haplotrema concavum
- Polygyra inflecta
- Polygyra inflecta media
- Polygyra fraterna
- Ventridens sp.
- unidentified species

dry-mesic upland forest; on top of sandstone bluff
- Polygyra tridentata
- Polygyra profunda

mowed lawn; under sandstone rocks and blocks of wood
- Hawaiia minuscula
- Retinella indentata
- Polygyra inflecta inflecta
- Zonitoides arboreus
- Pupillidae sp.

Southern Section of Lower Mississippi River Bottomlands Division

wet bottomland forest; flooded oak woods
- Lymnaea palustris

cypress swamp; along edge
- Polygyra fosteri

Southern Section of Ozark Division

loess hill prairie
- Polygyra fosteri
- Polygyra albolabris dentata
- Polygyra inflecta
- Polygyra profunda (fossil)
- Mesomphix cupreus
- Mesomphix perlaevis vulgatus
- unidentified fossil species

dry upland forest on deep loess
Polygyra fosteri

dry upland forest; W-facing, cherty limestone slope
Polygyra albolabris dentata

dry-mesic upland forest; upper slopes of high hill
Polygyra fraudulenta
Polygyra fraudulenta
Zonitidae sp.

dry to mesic forest and glades; W-facing, cherty limestone bluff

Polygyra inflecta
Polygyra fraudulenta
Polygyra albolabris dentata
Polygyra thyroidus
Anguispira alternata carinata
Haplotrema concavum
Mesomphix perlaevis vulgatus
Zonitoides arboreus
Zonitoides sp.
Stenotrema hubrichti
Hawaiia minuscula
Gastrocopta corticaria
unidentified species

dry-mesic upland forest; rocky, W-facing, limestone bluff
Polygyra appressa
Polygyra clausa
Polygyra fraterna
Polygyra inflecta inflecta
Mesomphix perlaevis vulgatus
Zonitoides arboreus
unidentified species

mesic ravine forest with cherty limestone outcrops
Polygyra thyroidus
Polygyra albolabris alleni
Haplotrema concavum

shale glade
Polygyra inflecta
Polygyra inflecta inflecta
Polygyra tridentata
Polygyra fraudulenta
Zonitoides arboreus
Zonitoides nitidus
Haplotrema concavum

Central Section of Ozark Division

dry to mesic upland forest along sandstone cliffs
Polygyra appressa
Polygyra fosteri

Northern Section of Ozark Division

dry upland forest and glades along W-facing limestone bluff
Polygyra fosteri
Mesomphix cupreus

Mt. Vernon Hill Country Section of the Southern Till Plain Division

mowed lawn
Polygyra fosteri

FIGURE 6.

ILLINOIS LAND SNAILS WITH COMMENTS ON OCCURRENCE AND ABUNDANCE ACCORDING TO BAKER, 1939
(those species with an asterisk are reported from the southernmost eleven counties)

Helicinidae

Hendersonia occulta - Menard Co.; very rare in state

Polygyridae

Polygyra dorfeuilliana* - Jackson Co.; upper part of dry bluffs; rare in state
Polygyra tridentata tridentata* - probably in all eleven cos.; limestone bluffs
Polygyra tridentata frisoni* - probably in all eleven cos.; limestone bluffs
Polygyra tridentata bidentata* - probably in all eleven cos.; limestone bluffs
Polygyra tridentata unidentata* - probably in all eleven cos.; limestone bluffs
Polygyra tridentata edentilabris* - probably in all eleven cos.; limestone bluffs
Polygyra fraudulenta* - perhaps in most of eleven cos.; ravines and valleys of Mississippi and Ohio rivers
Polygyra inflecta inflecta* - probably in all eleven cos.; Ohio and Mississippi valleys
Polygyra inflecta media* - probably in all eleven cos.; Ohio and Mississippi valleys
Polygyra inflecta edentata* - probably in all eleven cos.; Ohio and Mississippi valleys
Polygyra profunda profunda - only in fossil deposits in southern Illinois
Polygyra profunda efasciata - only in fossil deposits in southern Illinois
Polygyra albolabris albolabris - mostly in northern Illinois
Polygyra albolabris alleni* - probably in all eleven counties; forests with debris of long accumulation
Polygyra albolabris dentata* - Williamson Co.; very rare in state
Polygyra zaleta* - may be in all eleven cos.; ravines and bluffs
Polygyra multilineata multilineata* - Alexander Co.; swamps and low ground; uncommon in southern Illinois
Polygyra multilineata algonquinensis - northern Illinois
Polygyra multilineata alba* - Alexander Co.; swamps and low ground; rare in state

Polygyra multilineata rubra* - Alexander Co.; swamps and low ground
Polygyra palliata - eastern Illinois; very rare in state
Polygyra obstricta - eastern Illinois; very rare in state
Polygyra appressa* - probably in all eleven cos.; river bluffs
Polygyra fosteri* - probably in most of eleven cos.; limestone bluffs
Polygyra elevata* - Jackson and Alexander cos.; mesic ravines; uncommon in state
Polygyra pennsylvanica* - probably in all eleven cos.; mesic ravines
Polygyra thyroidus* - probably in most of eleven cos.; floodplains of larger river valleys
Polygyra clausa* - probably in all eleven cos.; river valleys, railway embankments, and rights-of-way with grass and small shrubs; prairie habitats
Polygyra stenotrema* - Hardin Co.; limestone quarry; very rare in state
Polygyra hirsuta* - probably in all eleven cos.; mesic and wet forests along river valleys
Polygyra monodon* - perhaps in all eleven cos.; more common in northern than southern part of the state; floodplain forests
Polygyra fraterna fraterna* - probably in most of eleven cos.; Ohio and Mississippi river bluffs
Polygyra fraterna cava - northern and central Illinois; rare
Polygyra leporina (or Lobosculum leporinum)* - Jackson, Union, Saline, and Hardin cos.; on wooded slopes; not common in state

Bulimulidae

Bulimulus dealbatus* - Jackson Co.; very rare in state

Zonitidae

Mesomphix cupreus* - probably in all eleven cos.; along river valleys, particularly on Mississippi River limestone cliffs
Mesomphix friabilis* - Williamson Co.; moist localities; rare in state
Mesomphix perlaevis vulgatus* - Saline, Gallatin, Pope, and Hardin cos.; forested hills with bushes and vines; uncommon in state

Retinella electrina (or Vitrea hammonis or V. viridulus) -

Illinois River valley; sporadic distribution

Retinella wheatleyi* - may be in southern eleven cos.; river valleys; rarely in woods bordering agricultural fields; probably not common

Retinella rhoadsi* - Jackson Co.; bluffs; very rare in state

Retinella indentata* - probably in all eleven cos.; forests

Hawaiia minuscula* - may be in some of eleven cos.; mesic and floodplain forests; sporadically distributed in state

Paravitrea capsella* - may be in some of eleven cos.; woodlands; not abundant in state, known only from seven cos.

Paravitrea significans* - may be in some of eleven cos.; woodlands; more common than P. capsella

Euconulus fulvus* - may be in some of eleven cos.; floodplains; widely scattered but not common in the state

Euconulus chersinus chersinus* - may be in some of eleven cos.; hilly regions bordering large rivers; more common than E. fulvus

Euconulus chersinus polygyratus - northern part of state

Striatura milium milium - McHenry Co.; woodlands; rare

Striatura milium meridionalis - Washington and Monroe cos.; woodlands; not common

Zonitoides arboreus* - probably in all eleven cos.; varied habitats; common

Zonitoides nitidus - northern part of state; muddy places on floodplains

Zonitoides limatulus - Clark, Washington, and Hamilton cos.; rocky ravines; rare

Ventridens ligerus* - probably in all eleven cos.; varied habitats; common

Ventridens demissus - Shelby and Effingham cos.; river bluffs; rare

Endodontidae

Anguispira alternata alternata* - probably in all eleven cos.; varied habitats; common

Anguispira alternata carinata* - Union, Pope, White, Hardin, and Gallatin cos.; hills and limestone bluffs near Ohio and Mississippi rivers; not so

common as A. a. alternata

Anguispira kochi* - may be in all eleven cos.; ravines and river banks and bluffs; scattered records

Discus cronkhitei anthonyi - northern Illinois; floodplains

Discus patulus* - probably in several of eleven cos.; varied habitats

Helicodiscus parallelus* - may be in all of eleven cos.; river valleys and floodplains

Helicodiscus singleyanus inermis* - may be in some of eleven cos.; most common in northern and eastern parts of state; floodplains

Punctum pygmaeum* - McHenry, Cook, Will, Washington, and Jackson cos.; woodlands; rare

Haplotrematidae

Haplotrema concavum* - probably in all eleven cos.; moist woods; found throughout the state

Pupillidae

Gastrocopta armifera armifera* - probably in all eleven cos.; wide variety of habitats, particularly characteristic of the prairie region of the state; common

Gastrocopta armifera similis* - may be in some of eleven cos.; not as common as G. a. armifera

Gastrocopta armifera affinis* - may be in some of eleven cos.

Gastrocopta armifera abbreviata* - Winnebago and Jackson cos.; rare

Gastrocopta contracta contracta* - may be in some of eleven cos.; variety of habitats; fairly common

Gastrocopta contracta climeana - Washington Co.; rare

Gastrocopta holzingeri* - Will, La Salle, Hancock, and Jackson cos.; variety of habitats; rare

Gastrocopta pentodon pentodon* - may be in some of eleven cos.; variety of habitats; widely distributed but scattered in state

Gastrocopta pentodon gracilis* - Jackson, Union, and Lawrence cos.; rare

Gastrocopta tappaniana* - may be in some of eleven cos.; variety of habitats; widely distributed but scattered in state

Gastrocopta corticaria* - may be in some of eleven cos.; tree-inhabiting in woodlands; scattered sites throughout Illinois
Gastrocopta procera procera* - eight cos. in the state including Union; woodlands; not common
Gastrocopta procera meclungi* - Effingham, Monroe, and Jackson cos.; varied habitats; rare

Vertigo morsei - Will Co.; rare
Vertigo ovata* - scatteringly distributed over the state in nine cos. including Jackson; floodplains
Vertigo ventricosa - Winnebago Co.; rare
Vertigo elatior - Winnebago Co.; rare
Vertigo tridentata - Will, La Salle, Champaign, and Fulton cos.; in grass or weeds; not common
Vertigo milium* - may be in some of eleven cos.; floodplains and forested river bluffs; well distributed but scattered in state

Pupoides marginatus* - known from Jackson Co. and may be in several of other southern Illinois cos.; wooded bluffs and hillsides; widely distributed in state

Columella edentula - McHenry, Fulton, and Washington cos.; floodplains; rare

Strobilopsidae

Strobilops labyrinthica labyrinthica* - may be in some of eleven cos.; woodlands but not common in floodplain areas; generally distributed over the state
Strobilops labyrinthica virgo* - McHenry, Washington, Williamson, and Saline cos.; not common
Strobilops labyrinthica parietalis - Washington, Marion, and La Salle cos.; rare
Strobilops affinis - Lake, McHenry, Kane, and Cook cos.; moist woodlands; rare
Strobilops aenea aenea* - probably in some of eleven cos.; higher upland forests; widely distributed in the state
Strobilops aenea micromphala* - White, Washington, and Hardin cos.; higher upland forests; not common
Strobilops aenea spiralis* - Union Co.; heavily wooded hill; very rare

Valloniidae

Vallonia pulchella* - probably in all eleven cos.; variety of habitats including floodplains; common
Vallonia excentrica - Champaign Co.; disturbed site; very rare
Vallonia costata - northern half of the state; floodplains and prairie habitats; rare
Vallonia parvula - northern half of the state; variety of habitats; not common

Cochlicopidae

Cochlicopa lubrica* - possible in southern cos.; in ravines and isolated woodlands; not common in the state and widely scattered

Succineidae

Succinea ovalis ovalis* - possible in southern cos.; under leaves and other forest debris; occurs only sporadically in northern part of state and rare in southern part
Succinea ovalis optima* - probable in southern cos.; more often in floodplain forests; more common in northern part of state
Succinea concordialis - only one locality in state; along railroad in Washington Co.
Succinea avara avara* - probable in southern cos.; distributed throughout the state; variety of habitats
Succinea avara wardiana* - probable in southern cos.; distributed throughout the state; variety of habitats
Succinea retusa retusa* - probable in southern cos.; more common in northern part; wet, marshy places
Succinea retusa magister - known from only a few localities in northern and central parts of state; wet marshy places
Succinea retusa decampi - known from only one locality, in Fulton Co.; wet, marshy places
Succinea retusa illinoisensis - known from only two localities in the state, both north of the south eleven cos.; wet, marshy places
Succinea retusa peoriensis - known from only four cos. in state, in northern and central cos.; wet, marshy places
Succinea salleana - known from only two cos. in the state, Monroe and St. Clair; wet, marshy places

Limacidae

Deroceras gracile* - probably in all eleven cos.; widely distributed in the state; found in a variety of habitats
Deroceras agreste - alien sp. found in several cos. but all north of southern eleven

Philomycidae

Philomycus carolinianus* - probably in all eleven cos.; widely distributed over the state; moist woodlands

Pallifera dorsalis - found in northern and central cos.; forest habitat
Pallifera fosteri - found in Monroe, Wayne, and Vermilion cos.; forest habitat

Ellobiidae

Carychium exiguum* - possibly in southern eleven cos.; more abundant in northern part of the state; under forest debris near water
Carychium exile* - probably in some of eleven cos.; widely distributed over most of the state; under forest debris near water

exotics

Oxychilus cellarium - greenhouses in northern cities
Oxychilus lucidum - parks in Chicago area

Opeas mauritianum - greenhouses in Chicago

Limax maximus - common in Chicago greenhouses
Limax flavus - in Chicago greenhouses

Testacella europaea - in Chicago greenhouses

species of possible presence

Polygyra mitchelliana - found in Indiana and Michigan

Retinella cryptomphala - common in Tennessee

Ventridens intertextus - common in Indiana

FIGURE 7.

LAND SNAILS COLLECTED IN THE ELEVEN SOUTHERNMOST COUNTIES OF ILLINOIS BY DR. FRANK BAKER, MOSTLY DURING 1931-32, FOR THE ILLINOIS NATURAL HISTORY SURVEY

Records examined and species listed per site
by Max D. Hutchison, May, 1989

Jackson Co., S end Fountain Bluff, 600', oak, elm, hickory, pine

Polygyra dorfeuilliana
Polygyra tridentata
Polygyra tridentata frisoni
Polygyra inflecta
Polygyra albolabris alleni
Polygyra zaleta
Polygyra clausa
Polygyra monodon fraterna
Bulimulus dealbatus
Mesomphix cupreus
Retinella wheatleyi
Retinella indentata
Zonitoides arboreus
Anguispira alternata
Anguispira kochii
Discus patulus
Helicodiscus parallelus
Haplotrema concavum
Strobilops aenea

Jackson Co., 2 mi. N Grand Tower, S end Fountain Bluff, Mississippi River side

Polygyra inflecta
Polygyra appressa
Polygyra appressa fosteri

Jackson Co., river bluff N Grand Tower, Mississippi River side

Polygyra tridentata unidentata
Polygyra inflecta
Polygyra profunda
Polygyra albolabris alleni
Polygyra zaleta
Mesomphix cupreus
Retinella indentata

Jackson Co., Fountain Bluff

Polygyra tridentata unidentata
Polygyra thyroidus
Mesomphix cupreus
Gastrocopta procera mcClungi

Jackson Co., Grand Tower

Helicodiscus parallelus
Helicodiscus singleyanus inermis

Jackson Co., Trestle Hollow, Fountain Bluff, rocky ravine, oak and hickory

Polygyra tridentata unidentata
Polygyra tridentata frisoni
Polygyra inflecta
Polygyra albolabris alleni
Polygyra zaleta
Polygyra appressa
Polygyra thyroidus
Polygyra monodon fraterna
Mesomphix cupreus
Haplotrema concavum

Jackson Co., 5 mi. E Carbondale, valley of Crab Orchard Creek, Rt. 13, open woodland, oak, hickory, sycamore

Polygyra inflecta
Polygyra appressa fosteri
Zonitoides arboreus
Anguispira alternata
Gastrocopta contracta
Strobilops labyrinthica

Jackson Co., floodplain of Big Muddy River, Rt. 2, N Carbondale

Polygyra zaleta
Polygyra appressa fosteri
Retinella indentata
Haplotrema concavum

Jackson Co., Rt 13, N Murphysboro, Beaucoup Creek bottoms, oak, sycamore, maple

Polygyra appressa fosteri
Retinella indentata

Zonitoides arboreus
Haplotrema concavum
Succinea avara

Jackson Co., Makanda

Polygyra monodon fraterna

Williamson Co., 1 1/2 mi. SW Stonefort, 500', forested hill

Polygyra inflecta
Polygyra thyroidus
Retinella indentata
Zonitoides arboreus
Strobilops labyrinthica

Williamson Co., 3 mi. S Marion, parkland with black oak

Zonitoides arboreus
Strobilops virgo

Williamson Co., 2 mi. S Herrin, Rt. 148, wooded parkland, oak

Zonitoides arboreus

Saline Co., 3 mi. NW Herod, dome shaped wooded hill, 920'-800'

Polygyra inflecta
Polygyra appressa fosteri
Mesomphix perlaevis vulgatus
Retinella indentata

Saline Co., Horton Hill, 980'-800', Mountain Tnsp.

Polygyra inflecta
Polygyra appressa
Polygyra appressa fosteri
Polygyra thyroidus
Polygyra monodon fraterna
Mesomphix cupreus
Retinella indentata
Zonitoides arboreus

Saline Co., Cave Hill, 940', 700'-800', 5 mi. SW Equality

Polygyra inflecta
Polygyra appressa fosteri
Polygyra monodon fraterna
Lobosculum leporinum
Retinella indentata
Zonitoides arboreus
Anguispira alternata
Helicodiscus parallelus
Strobilops labyrinthica
Strobilops virgo
Succinea avara

Gallatin Co., Shawneetown Hills, 3 mi. NNE Shawneetown, 500', forest glad(e)

Polygyra inflecta
Mesomphix perlaevis vulgatus
Retinella indentata
Paravitrea significans
Anguispira alternata carinata
Discus patulus

Union Co., 8 mi. SW Anna, in hills, 600'-700'

Hendersonia occulta (fossil ?)
Polygyra fraudulenta
Polygyra inflecta
Polygyra zaleta
Polygyra appressa fosteri
Polygyra thyroidus
Polygyra monodon fraterna
Lobosculum leporinum
Mesomphix cupreus
Retinella indentata
Discus patulus
Gastrocopta armifera

Union Co., wooded hill near Lake Hill School, 4 mi. SW Anna

Polygyra fraudulenta
Polygyra appressa fosteri
Discus patulus

Union Co., 3 mi. W Alto Pass, in valley, 600'

Polygyra fraudulenta
Polygyra appressa
Polygyra appressa fosteri

Polygyra thyroidus
Mesomphix cupreus
Retinella indentata
Anguispira alternata
Haplotrema concavum

Union Co., W Alto Pass

Polygyra fraudulenta
Polygyra inflecta
Polygyra zaleta
Polygyra appressa fosteri
Polygyra thyroidus
Polygyra hirsuta
Polygyra monodon fraterna
Mesomphix cupreus
Zonitoides arboreus
Ventridens ligera (ligerus)
Anguispira alternata
Discus patulus
Haplotrema concavum
Gastrocopta armifera
Pupoides marginatus

Union Co., 2 mi. SW Alto Pass, Bald Knob, 1030', wooded hill, stony

Polygyra fraudulenta
Polygyra inflecta
Polygyra zaleta
Polygyra appressa
Polygyra appressa fosteri
Anguispira alternata carinata
Haplotrema concavum

Union Co., Giant City State Park, hilly woodland, oak, hickory, pine

Polygyra fraudulenta
Polygyra inflecta
Polygyra appressa
Polygyra appressa fosteri
Polygyra thyroidus
Mesomphix cupreus
Retinella wheatleyi
Retinella indentata
Zonitoides arboreus
Anguispira alternata
Discus patulus

Helicodiscus parallelus
Cochlicopa lubrica

Union Co., 3 mi. N Alto Pass, hilly parkland, oak, hickory

Polygyra fraudulenta
Polygyra appressa fosteri
Polygyra thyroidus

Union Co., 3 mi. N Dongola, woodland

Polygyra fraudulenta
Polygyra inflecta
Discus patulus
Helicodiscus parallelus

Union Co., 2 mi. W Alto Pass, Seminary Creek, N Bald Knob, valley woodland, 600'

Polygyra fraudulenta
Polygyra appressa fosteri
Polygyra thyroidus
Polygyra monodon fraterna
Mesomphix cupreus
Haplotrema concavum

Union Co., 1/2 mi. E Alto Pass, 800', rock hillside, wooded

Polygyra appressa fosteri
Retinella indentata

Union Co., 1 1/2 mi. N Alto Pass, hilly woodland, oak, elm, walnut, hickory

Polygyra fraudulenta
Polygyra appressa fosteri
Polygyra thyroidus
Polygyra monodon fraterna
Mesomphix cupreus
Retinella indentata
Zonitoides arboreus
Haplotrema concavum

Union Co., 10 mi. SW Anna, on hillside

Polygyra inflecta

Polygyra zaleta
Polygyra appressa fosteri
Mesomphix cupreus

Union Co., ICRR embankment, 4 1/2 mi. SSW* Anna, near Balcom

Polygyra appressa appressa
Polygyra appressa fosteri
Polygyra thyroidus

Union Co., near Cobden, ICRR embankment

Polygyra appressa
Polygyra appressa fosteri
Polygyra thyroidus
Retinella indentata
Hawaiia minuscula
Gastrocopta armifera
Gastrocopta procera
Succinea avara

Union Co., near Reynoldsville, animal eaten by rodents

Polygyra thyroidus

Union Co., 1 3/4 mi. E Reynoldsville, Twp. 19, floodplain Main Ditch, forest

Polygyra thyroidus
Retinella indentata
Euconulus fulvus
Succinea avara

Union Co., 5 mi. S Anna, near hardroad, wooded hillside

Zonitoides arboreus

Johnson Co., Schwartz Hill, N Vienna, 500', forest hill

Polygyra inflecta
Polygyra monodon fraterna
Retinella indentata

Johnson Co., 7 mi. NNW Vienna, forested hill, 600'-700'

* probable should be "SSE"

Polygyra inflecta
Polygyra monodon fraterna
Retinella indentata
Zonitoides arboreus
Anguispira kochi
Discus patulus

Johnson Co., 4 1/2 mi. SW Vienna, floodplain Cache River, woods

Polygyra appressa fosteri
Polygyra thyroidus
Zonitoides arboreus
Anguispira alternata

Pope Co., 4 mi. W Golconda, wooded hill

Polygyra tridentata unidentata
Polygyra tridentata frisoni
Polygyra inflecta
Mesomphix cupreus
Retinella indentata
Zonitoides arboreus
Strobilops labyrinthica
Strobilops aenea

Pope Co., Bay City, limestone* bluff, Ohio River, 400'-500'

Polygyra tridentata frisoni
Polygyra inflecta
Polygyra zaleta
Polygyra appressa
Polygyra hirsuta
Mesomphix perlaevis vulgatus
Retinella indentata
Zonitoides arboreus
Euconulus chersinus
Anguispira alternata carinata
Discus patulus
Helicodiscus parallelus
Haplotrema concavum

Pope Co., Golconda, limestone* bluffs, Ohio River, 350'-400'

Polygyra tridentata frisoni
Polygyra zaleta
Polygyra appressa fosteri
Polygyra monodon fraterna
Mesomphix perlaevis vulgatus

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* I doubt that the bluffs are primarily "limestone" - M. D. Hutchison

Haplotrema concavum

Hardin Co., 1 mi. NE Elizabethtown, limestone* bluffs on Ohio River, 300'-400'

Polygyra tridentata bidentata
Polygyra tridentata unidentata
Polygyra tridentata frisoni
Polygyra tridentata edentilabris
Polygyra inflecta
Polygyra appressa
Polygyra thyroidus
Polygyra monodon fraterna
Mesomphix perlaevis vulgatus
Retinella indentata
Zonitoides arboreus
Anguispira alternata
Discus patulus
Helicodiscus singleyanus inermis
Haplotrema concavum
Gastrocopta armifera
Vallonia parvula

Hardin Co., 1 mi. SW Elizabethtown, old quarry bordering Ohio River, 400'

Polygyra tridentata unidentata
Polygyra tridentata frisoni
Polygyra tridentata edentilabris
Polygyra appressa
Polygyra stenotrema
Zonitoides arboreus
Anguispira alternata carinata

Hardin Co., Cave in Rock, limestone* bluff bordering Ohio River

Polygyra tridentata unidentata
Polygyra tridentata frisoni
Polygyra tridentata
Polygyra appressa

Hardin Co., 4 mi. SE Gibsonia, Beaver Creek, county boundary line, 600', hilly woodland, burnt over

Polygyra fraudulenta
Polygyra inflecta
Polygyra thyroidus
Mesomphix perlaevis vulgatus

* I doubt that the bluffs are primarily limestone - M. D. Hutchison

Discus patulus
Haplotrema concavum

Hardin Co., 3 mi. NW Elizabethtown, valley of Big Creek, 380'

Polygyra inflecta media
Polygyra inflecta
Polygyra edentata
Polygyra zaleta
Polygyra appressa appressa
Polygyra appressa fosteri
Polygyra thyroidus
Polygyra clausa
Polygyra monodon cava
Mesomphix perlaevis vulgatus
Retinella indentata
Anguispira alternata carinata
Haplotrema concavum

Hardin Co., 3 mi. N Rosiclare, forest hillside, 500'

Polygyra inflecta
Polygyra monodon fraterna
Mesomphix perlaevis vulgatus

Hardin Co., McFarlan Twp., 3 mi. NE Elizabethtown, wooded hill, 560', rocky

Polygyra inflecta
Polygyra monodon fraterna
Lobosculum leporinum
Mesomphix perlaevis vulgatus
Retinella wheatleyi
Retinella indentata
Euconulus chersinus
Gastrocopta armifera
Strobilops labyrinthica

Hardin Co., woodland 1/2 mi. NE Cave in Rock

Polygyra tridentata frisoni
Polygyra inflecta
Polygyra thyroidus
Polygyra hirsuta
Mesomphix perlaevis vulgatus
Hawaiia minuscula
Zonitoides arboreus
Helicodiscus parallelus

Haplotrema concavum
Strobilops aenea
Strobilops aenea micromphala

Hardin Co., Ohio River bluff E Rosiclare

Mesomphix perlaevis vulgatus

Alexander Co., 2 mi. E McClure, Dongola Hollow hills, 720'-600'

Polygyra inflecta
Polygyra edentata
Polygyra zaleta
Polygyra appressa fosteri
Polygyra elevata
Polygyra thyroidus
Mesomphix cupreus
Ventridens ligerus
Anguispira alternata
Discus patulus

Alexander Co., wooded hill near Thebes

Polygyra inflecta
Polygyra elevata
Polygyra thyroidus

Alexander Co., Cairo Point, junction of Mississippi and Ohio rivers, old floodplain forest grove

Polygyra multilineata
Polygyra thyroidus
Ventridens ligerus
Succinea avara

Alexander Co., 1 mi. S Cairo, Mississippi River floodplain, W of hardroad

Polygyra multilineata
Polygyra appressa
Polygyra thyroidus

Alexander Co., N Cairo, IC ROW, W of road, burned over

Polygyra thyroidus
Retinella indentata

Ventridens ligerus
Succinea avara

Massac Co., 7 mi. N Brookport, hilly woodland

Polygyra inflecta media
Polygyra inflecta
Polygyra edentata
Polygyra monodon fraterna
Retinella indentata
Zonitoides arboreus

Massac Co., 6 mi. NW Metropolis, swamp near Q Ditch

Polygyra albolabris alleni
Polygyra thyroidus

Massac Co., Seven Mile Creek, 3 mi. E Metropolis, near Ohio River

Succinea avara

FIGURE 8.

A COMPARISON OF BAKER (1939) AND HUBRICHT (1985) LAND SNAIL OCCURRENCES WITH COLLECTIONS DURING THIS SURVEY (1980-89)

Max D. Hutchison

HELICINIDAE

Hendersonia occulta
- Baker: one collection in south eleven cos. of fossils, "Union Co., 8 mi. SW of Anna, in hills" -- very abundant in fossil deposits; known only from Menard Co. as a living member;
- Hubricht: fossils reported in Jackson Co.
- Hutchison: did not find

POMATIOPSIDAE

Pomatiopsis lapidaria
- Baker: not listed
- Hubricht: fossils reported in Union Co.
- Hutchison: did not find

CARYCHIIDAE

Carychium exile exile
- Baker: listed as C. exile; no collections in south eleven cos.-- widely distributed over most of Illinois
- Hubricht: listed for Jackson Co. in southern part of state
- Hutchison: did not find

Carychium exile canadense
- Baker: canadense subspecies not listed
- Hubricht: fossils reported from Jackson Co.
- Hutchison: did not find

COCHLICOPIDAE

Cochlicopa lubrica
- Baker: one collection, "Giant City State Park, in hilly woodland" -- not common in Illinois, and records are widely scattered
- Hubricht: listed for Jackson Co.
- Hutchison: did not find

VALLONIIDAE

Vallonia parvula
- Baker: one collection, "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs" -- rare in Illinois; known

from only the north half
- Hubricht: listed for Union Co.
- Hutchison: did not find

Vallonia gracilicosta
- Baker: not listed
- Hubricht: fossils reported for Alexander Co.
- Hutchison: did not find

Vallonia perspectiva
- Baker: not listed
- Hubricht: fossils reported for Union Co.
- Hutchison: did not find

PUPILLIDAE

Pupoides albilabris
- Baker: not listed
- Hubricht: listed from Jackson, Union, Hardin, and Pope cos.
- Hutchison: did not find

Pupoides marginatus
- Baker: one collection, "Union Co., W of Alto Pass" -- only sp. of this genus in Ill.; widely distributed over Illinois; particularly abundant in Jackson Co. in the southern part
- Hubricht: not listed (same as P. albilabris ?)
- Hutchison: did not identify

Gastrocopta contracta contracta
- Baker: one collection, "Jackson Co., 5 mi. E of Carbondale, Crab Orchard Creek valley, open woodland," -- fairly common over Illinois
- Hubricht: listed as G. contracta; reported from Jackson Co. in southern part
- Hutchison: did not identify

Gastrocopta contracta climean
- Baker: known from only one site in the state, in Washington Co.
- Hubricht: included with G. contracta
- Hutchison: did not find

Gastrocopta armifera armifera
- Baker: collections at 1) "Union Co., 8 mi. SW of Anna, in hills," 2) "Union Co., W of Alto Pass," 3) "Union Co., railroad embankment near Cobden," 4) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 5) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill" -- occurs abundantly in almost every Illinois Co.

- Hubricht: G. armifera is listed from Jackson and Union cos.
- Hutchison: did not identify

Gastrocopta armifera similis
- Baker: no collections -- less widely distributed than G. a. armifera
- Hubricht: listed as G. similis; not reported in south eleven cos.
- Hutchison: did not identify

Gastrocopta armifera affinis
- Baker: no collections in south eleven cos. -- no distribution information
- Hubricht: probably grouped with G. similis; not listed as a distinct sp.
- Hutchison: did not identify

Gastrocopta armifera abbreviata
- Baker: no collections in south eleven cos. -- rare in Illinois; known from only Winnebago and Jackson cos.
- Hubricht: listed as G. abbreviata; reported from Jackson Co.
- Hutchison: did not identify

Gastrocopta procera procera
- Baker: one collection, "Union Co., railroad embankment near Cobden" -- reported from nine cos. in Illinois including Union
- Hubricht: listed as G. procera; listed from Jackson and Union cos.
- Hutchison: did not identify

Gastrocopta procera mcclungi
- Baker: one collection, "Jackson Co., Fountain Bluff" -- known from three sites in the state including Grand Tower in Jackson Co.
- Hubricht: included with G. procera
- Hutchison: did not identify

Gastrocopta holzingeri
- Baker: no collections -- rare in Illinois; known from four sites including Jackson Co.
- Hubricht: listed from Jackson Co.
- Hutchison: did not identify

Gastrocopta abbreviata
- Baker: not listed
- Hubricht: listed from Jackson Co.
- Hutchison: did not identify

Gastrocopta tappaniana

- Baker: no collections -- distributed throughout Illinois but widely scattered
- Hubricht: listed from Jackson and Union cos.
- Hutchison: did not identify

Gastrocopta pentodon pentodon
- Baker: no collections -- distributed throughout Illinois but widely scattered
- Hubricht: listed from Jackson and Union cos.
- Hutchison: did not identify

Gastrocopta corticaria
- Baker: no collections in south eleven cos. -- scattered throughout Illinois
- Hubricht: reported from Jackson Co. in river drift
- Hutchison: one possible collection at "Union Co., Pine Hills, limestone cliff"

Vertigo milium
- Baker: no collections -- well distributed over Illinois, but the records are scattered
- Hubricht: listed from Jackson Co.
- Hutchison: did not find

Vertigo ovata
- Baker: no collections -- scatteringly distributed over Illinois; listed from Jackson Co.
- Hubricht: listed from Jackson Co.
- Hutchison: did not find

Vertigo elatior
- Baker: no collections -- living specimens known only from Winnebago Co. in Illinois; abundant and widely distributed as a fossil
- Hubricht: listed as a fossil in Jackson Co.
- Hutchison: did not find

Vertigo hubrichti
- Baker: not listed
- Hubricht: listed as a fossil in Jackson and Alexander cos.
- Hutchison: did not find

Vertigo modesta modesta
- Baker: not listed
- Hubricht: listed as a fossil in Jackson and Alexander cos.
- Hutchison: did not find

Vertigo brierensis
- Baker: not listed
- Hubricht: listed as a fossil in Jackson Co.

- Hutchison: did not find

STROBILOPSIDAE

Strobilops labyrinthica labyrinthica
- Baker: collections at 1) "Jackson Co., 5 mi. E of Carbondale, Crab Orchard Creek valley, open woodland," 2) "Williamson Co., 1 1/2 mi. SW of Stonefort, forested hill," 3) "Saline Co., Cave Hill," 4) "Pope Co., 4 mi. W of Golconda, wooded hill," 5) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill" -- generally distributed over Illinois
- Hubricht: listed as S. labyrinthica; reported from Jackson, Williamson, Saline, Pope, and Hardin cos.
- Hutchison: one collection identified, "Johnson Co., Cave Creek, limestone glade"

Strobilops labyrinthica virgo
- Baker: collections at 1) "Williamson Co., 3 mi. S of Marion, parkland with black oak," 2) "Saline Co., Cave Hill" -- known from only four cos. in the state including Williamson and Saline
- Hubricht: included with S. labyrinthica
- Hutchison: did not identify

Strobilops aenea aenea
- Baker: collections at 1) "Jackson Co., S end of Fountain Bluff," 2) "Pope Co., 4 mi. W of Golconda, wooded hill," 3) "1/2 mi. NE of Cave in Rock, woodland" -- distributed widely in Illinois
- Hubricht: listed as S. aenea; reported from Jackson, Union, Pope, and Hardin cos.
- Hutchison: did not identify

Strobilops aenea micromphala
- Baker: one collection, "Hardin Co., 1/2 mi. NE of Cave in Rock, woodland" -- known from three cos. in Illinois including Hardin
- Hubricht: included with S. aenea
- Hutchison: did not identify

Strobilops aenea spiralis
- Baker: no collections -- known in Illinois only from Union Co., near Alto Pass
- Hubricht: may be listed as S. texasiana; no records in Illinois
- Hutchison: did not identify

SUCCINEIDAE

Succinea chittenangoensis

- Baker: probably listed as S. ovalis; the S. ovalis optima subspecies occurs almost throughout the state
- Hubricht: listed as a fossil in Union Co.
- Hutchison: did not find

Succinea bakeri
- Baker: not listed
- Hubricht: listed as a fossil in Alexander Co.
- Hutchison: did not find

Succinea ovalis optima
- Baker: occurs almost throughout the state?
- Hubricht: probably listed as S. chittenangoensis; listed as a fossil in Union Co.
- Hutchison: did not identify

Catinella avara
- Baker: listed as Succinea avara with two subspecies, S. avara avara and S. avara wardiana; both are reported as distributed throughout Illinois in suitable habitats; collections of S. avara avara at 1) "Jackson Co., Beaucoup Creek bottoms, N of Murphysboro," 2) "Saline Co., Cave Hill," 3) "Union Co., railroad embankment near Cobden," 4) "Union Co., 1 3/4 mi. E of Reynoldsville, floodplain forest," 5) "Alexander Co., Cairo Point, floodplain forest at junction of Ohio and Mississippi rivers," 6) "Alexander Co., railroad embankment N of Cairo," 7) "Massac Co., 3 mi. E of Metropolis, Seven Mile Creek"
- Hubricht: listed from Saline, Hardin, and Pope cos.
- Hutchison: did not identify

Catinella gelida
- Baker: not listed
- Hubricht: listed as a fossil in Saline Co.
- Hutchison: did not find

LIMACIDAE

Deroceras laeve
- Baker: not listed
- Hubricht: listed from Jackson Co. in southern part
- Hutchison: did not find

Deroceras gracile
- Baker: no collections; widely distributed over Illinois
- Hubricht: not listed
- Hutchison: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Johnson Co., near Heron Pond, Bird Spring, in woods," 3) "Johnson Co., near Goreville, mowed lawn"

PHILOMYCIDAE

Philomycus carolinianus
- Baker: wide distribution over Illinois
- Hubricht: listed from Jackson, Williamson, Union, Alexander, Johnson, Massac, and Pope cos.
- Hutchison: no collections

Pallifera fosteri
- Baker: no collections in south eleven cos. -- not known from south eleven cos.
- Hubricht: not listed for south eleven cos.
- Hutchison: one collection, "Johnson Co., near Heron Pond, Bird Spring, in woods"

Megapallifera mutabilis
- Baker: not listed
- Hubricht: listed from Jackson and Union cos.
- Hutchison: did not find

Megapallifera ragsdalei
- Baker: not listed
- Hubricht: listed from Jackson Co.
- Hutchison: did not find

DISCIDAE

Anguispira alternata alternata
- Baker: collections at 1) "Jackson Co., S end of Fountain Bluff," 2) "Saline Co., Cave Hill," 3) "Union Co., W of Alto Pass, in valley," 4) "Giant City State Park, hilly woodland," 5) "Johnson Co., 4 1/2 mi. SW of Vienna, floodplain woods," 6) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 7) "Alexander Co., Dongola Hollow hills" -- perhaps the state's most abundant land snail
- Hubricht: listed as A. alternata; reported from all of eleven southern cos. except Pulaski and Massac
- Hutchison: a single collection from the south eleven cos. but specific locality unknown

Anguispira alternata carinata
- Baker: collections at 1) "Gallatin Co., 3 mi. NNE of Shawneetown, Shawneetown Hills, in a forest glade," 2) "Union Co., Bald Knob, woodland," 3) "Pope Co., Bay City, Ohio River bluffs," 4) "Hardin Co., 1 mi. SW of Elizabethtown, old quarry," 5) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek" -- reported from Union, Pope, White, Hardin, and Gallatin cos.
- Hubricht: probably included with A. alternata
- Hutchison: collected at 1) "Jackson Co., Giant City, Fern Rocks Nature Preserve," 2) "Union Co., Pine Hills, limestone bluff," 3) "Johnson Co., Cave Creek, limestone glade"

Anguispira strongylodes
- Baker: probably included with one of A. alternata subspecies
- Hubricht: listed from Alexander Co.
- Hutchison: did not find

Anguispira kochi
- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Johnson Co., 7 mi. NNW of Vienna, forested hill" -- in scattered places over the greater part of Illinois
- Hubricht: listed from Jackson and Johnson cos.
- Hutchison: did not find

Discus cronkhitei
- Baker: listed as D. cronkhitei anthonyi; confined to northern half of the state
- Hubricht: listed as a fossil in Alexander and Jackson cos.
- Hutchison: did not find

Discus macclintocki
- Baker: not listed
- Hubricht: listed as a fossil in Alexander Co.
- Hutchison: did not find

Discus patulus
- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "3 mi. NNE of Shawneetown, Shawneetown Hills, in forest glade," 3) "Union Co., 8 mi. SW of Anna, in hills," 4) "Union Co., 4 mi. SW of Anna, Lake Hill School, wooded hill," 5) "Union Co., W of Alto Pass," 6) "Giant City State Park, hilly woodland," 7) "Union Co., 3 mi. N of Dongola, woodland," 8) "Johnson Co., 7 mi. NNW of Vienna, forested hill," 9) "Pope Co., Bay City, Ohio River bluff," 10) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 11) "Hardin Co., 4 mi. SE of Gibsonia, Beaver Creek, hilly woodland," 12) "Alexander Co., Dongola Hollow hills" -- most abundant in the southern part of the state
- Hubricht: listed from all southernmost eleven cos. except Williamson and Saline
- Hutchison: collected at 1) "Jackson Co., Giant City State Park, Fern Rocks Nature Preserve," 2) "Johnson Co., Cave Creek, limestone glade," 3) "Johnson Co., Simpson Township Hill Prairie limestone glade"

HELICODISCIDAE

Helicodiscus notius notius
- Baker: not listed
- Hubricht: listed from Union Co.
- Hutchison: did not find

Helicodiscus singleyanus
- Baker: listed as H. singleyanus inermis; collected at 1) "Jackson Co., Grand Tower," 2) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 3) "Hardin Co., 1/2 mi. NE of Cave in Rock, woodland" -- widely distributed throughout Illinois but somewhat scattered
- Hubricht: listed as a fossil in Union Co.
- Hutchison: did not find

Helicodiscus parallelus
- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Grand Tower," 3) "Saline Co., Cave Hill," 4) "Jackson Co., Giant City State Park, hilly woodland," 5) "Union Co., 3 mi. N of Dongola, woodland," 6) "Pope Co., Bay City, Ohio River bluff" -- distributed throughout Illinois
- Hubricht: listed from Union Co.
- Hutchison: did not find

PUNCTIDAE

Punctum minutissimum
- Baker: probably listed as P. pygmaeum; no collections -- recorded from only five cos. in the state including Jackson
- Hubricht: listed from Jackson, Union, and Williamson cos.
- Hutchison: did not find

ZONITIDAE

Nesovitrea electrina
- Baker: listed as Retinella electrina; no collections -- distribution is sporadic
- Hubricht: listed as a fossil in Jackson, Union, Alexander, and Gallatin cos.
- Hutchison: did not find

Glyphyalinia wheatleyi
- Baker: listed as Retinella wheatleyi; collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Giant City State Park, hilly woodland," 3) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill" -- confined to the southern half of Illinois
- Hubricht: listed from Jackson, Union, and Alexander cos.
- Hutchison: did not identify

Glyphyalinia indentata
- Baker: listed as Retinella indentata; collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., river bluff N of Grand Tower," 3) "Jackson Co., N of Carbondale, Big Muddy River floodplain," 4) "Jackson Co., N of Murphysboro,

Beaucoup Creek bottoms," 5) "Williamson Co., 1 1/2 mi. SW of Stonefort, forested hill," 6) "Saline Co., dome-shaped hill, 3 mi. NW of Herod, in woods," 7) "Saline Co., Horton Hill," 8) "Saline Co., Cave Hill," 9) "Gallatin Co., 3 mi. NNE of Shawneetown, Shawneetown Hills, in forest glade," 10) "Union Co., 8 mi. SW of Anna, in hills," 11) "Union Co., 3 mi. W of Alto Pass, in valley," 12) "Jackson Co., Giant City State Park, wooded hills," 13) "Union Co., 1/2 mi. E of Alto Pass, wooded rocky hillside" 14) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 15) "Union Co., railroad embankment near Cobden," 16) "Union Co., 1 3/4 mi. E of Reynoldsville, floodplain forest," 17) "Johnson Co., Schwartz Hill, N of Vienna, forest," 18) "Pope Co., 4 mi. W of Golconda, wooded hill," 19) "Pope Co., Bay City, Ohio River bluff," 20) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 21) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek," 22) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill," 23) "Alexander Co., N of Cairo, railroad embankment," 24) "Massac Co., 7 mi. N of Brookport, hilly woodland" -- in almost every county in the state and one of the most abundant Illinois species

- Hubricht: listed from all of the south eleven cos.
- Hutchison: collected at 1) "Hardin Co., Panther Hollow," 2) "Johnson Co., near Heron Pond, woods," 3) "Johnson Co., Wildcat Bluff, limestone glade," 4) "Johnson Co., Simpson Township Hill Prairie, limestone glade," 5) "Johnson Co., Cave Creek, limestone glade," 6) "Johnson Co., near Goreville, mowed lawn"

Mesomphix friabilis

- Baker: no collections in south eleven cos. -- known from only three sites in Illinois including Williamson Co.
- Hubricht: listed from Jackson, Union, and Williamson cos.
- Hutchison: collected at 1) "Johnson Co., Heron Pond-Little Black Slough, along railroad embankment," 2) "Johnson Co., Heron Pond, N edge of swamp in woods," 3) "Johnson Co., Cave Creek, limestone glade;" (may be confused with M. cupreus)

Mesomphix globosus

- Baker: not listed
- Hubricht: listed from Pope, Saline, Hardin, and Gallatin cos.
- Hutchison: did not identify

Mesomphix perlaevis vulgatus

- Baker: collected at 1) "Saline Co., dome-shaped wooded hill, 3 mi. NW of Herod," 2) "Gallatin Co., 3 mi. NNE of Shawneetown, Shawneetown Hills, in forest glade," 3) "Pope Co., Bay City, Ohio River bluff," 4) "Pope Co., Golconda, Ohio River bluffs," 5) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 6) "Hardin Co., 4 mi. SE of Gibsonia, Beaver Creek, hilly woodland," 7) "Hardin Co., 3 mi. NW of Eilzabethtown, valley of Big Creek," 8) "Hardin Co., 3 mi. N of Rosiclare,

forested hillside," 9) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill," 10) "Hardin Co., 1/2 mi. NE of Cave in Rock, woodland," 11) "Hardin Co., E of Rosiclare, Ohio River bluff" -- known from Saline, Hardin, Gallatin, and Pope cos. in Illinois

- Hubricht: both M. perlaevis and M. vulgatus are listed as separate species, but neither are recorded from Illinois
- Hutchison: collected at 1) "Hardin Co., Panther Hollow," 2) "Hardin Co., Whoopie Cat Mountain, limestone glade," 3) "Hardin Co., Shetlerville, abandoned limestone quarry," 4) "Massac Co., near Joppa, Ohio River bank," 5) "Union Co., Atwood Ridge," 6) "Johnson Co., near Heron Pond, in woods," 7) "Pope Co., W of Golconda, Werner Tract, limestone glade," 8) "Johnson Co., Indian Point, limestone glade," 9) "Johnson Co., near Heron Pond, Bird Spring, in woods," 10) "Johnson Co., near Belknap, abandoned limestone quarry," 11) "Pope Co., near Raum, Pleasant Valley, limestone glade," 12) "Union Co., Pine Hills, limestone cliffs," 13) "Johnson Co., Cave Creek, limestone glade," 14) "Jackson Co., N of Grand Tower, Devil's Backbone, limestone bluff"

Mesomphix cupreus

- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., river bluff N of Grand Tower," 3) "Jackson Co., Fountain Bluff, Trestle Hollow," 4) "Saline Co., Horton Hill," 5) "Union Co, 8 mi. SW of Anna, in hills," 6) "Union Co., 3 mi. W of Alto Pass, in valley," 7) "Jackson Co., Giant City State Park, hilly woodland," 8) "Union Co., 2 mi. W of Alto Pass, Seminary Creek, valley woodland," 9) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 10) "Union Co., 10 mi. SW of Anna, hillside," 11) "Pope Co., 4 mi. W of Golconda, wooded hill," 12) "Alexander Co., Dongola Hollow hills" -- abundant in southern Illinois
- Hubricht: not recorded in Illinois
- Hutchison: collected at 1) "Johnson Co., Simpson Township Hill Prairie, limestone glade," 2) "Alexander Co., Ozark Hill Prairies, loess hill prairie," 3) "Monroe Co., Fults Hill Prairie, limestone bluff," 4) "Pope Co., Leisure City, limestone glade," 5) "Johnson Co., Indian Point, limestone glade," 6) "Johnson Co., near Heron Pond, Bird Spring, in woods," 7) "Johnson Co., Cave Creek, limestone glade"

Paravitrea capsella

- Baker: no collections -- confined largely to the southern half of the state
- Hubricht: recorded for Jackson and Union cos. in southern part
- Hutchison: collected at "Massac Co., American Electric Power Co. plant, Halesia Nature Preserve, edge of woods"

Paravitrea significans

- Baker: one collection in south eleven cos., "Gallatin Co., 3 mi. NNE of Shawneetown, Shawneetown Hills, in forest

glade" -- confined to southern half of state
- Hubricht: not listed in south eleven cos.
- Hutchison: did not identify

Hawaiia minuscula
- Baker: collected at 1) "Union Co., near Cobden, railroad embankment," 2) "Hardin Co., 1/2 mi. E of Cave in Rock, woodland" -- abundantly though sporadically distributed throughout Illinois
- Hubricht: listed from Jackson, Union, and Williamson cos.
- Hutchison: collected at 1) "Union Co., Pine Hills, limestone cliff," 2) "Johnson Co., near Goreville, mowed lawn"

Ventridens ligera
- Baker: listed as V. ligerus; collected at 1) "Union Co., W of Alto Pass," 2) "Alexander Co., Dongola Hollow hills," 3) "Alexander Co., Cairo Point, junction of Ohio and Mississippi rivers, floodplain forest," 4) "Alexander Co., N of Cairo, railroad embankment," -- found over much of Illinois but particularly abundant in the hill and bluff region of the extreme southern part
- Hubricht: listed from Jackson, Union, Williamson, Massac, and Pope cos. in the southern part
- Hutchison: collected at 1) "Johnson Co., near Heron Pond, mowed pasture," 2) "Johnson Co., Vienna, mowed lawn"

Zonitoides arboreus
- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., 5 mi. E of Carbondale, Crab Orchard Creek valley, open woodland," 3) "Jackson Co., N of Murphysboro, Beaucoup Creek bottoms, woods," 4) "Williamson Co., 1 1/2 mi. SW of Stonefort, forested hill," 5) "Williamson Co., 3 mi. S of Marion, oak parkland," 6) "Williamson Co., 2 mi. S of Herrin, wooded parkland," 7) "Saline Co., Horton Hill," 8) "Saline Co., Cave Hill," 9) "Union Co., W of Alto Pass," 10) "Jackson Co., Giant City State Park, hilly woodland," 11) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 12) "Union Co., 5 mi. S of Anna, wooded hillside," 13) "Johnson Co., 7 mi. NNW of Vienna, forested hill," 14) "Johnson Co., 4 1/2 mi. SW of Vienna, Cache floodplain woods," 15) "Pope Co., 4 mi. W of Golconda, wooded hill," 16) "Pope Co., Bay City, Ohio River bluff," 17) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 18) "Hardin Co., 1 mi. SW of Elizabethtown, old quarry," 19) "Hardin Co., 1/2 mi. NE of Cave in Rock, woodland," 20) "Massac Co., 7 mi. N of Brookport, hilly woodland" -- among the most abundant of the land snails in Illinois and distributed throughout the entire state
- Hubricht: listed from every co. except Pulaski
- Hutchison: collected at 1) "Union Co., Berryville, shale glade," 2) "Johnson Co., Wise Ridge, limestone glade," 3) "Union Co., Pine Hills, limestone cliff," 4) "Johnson Co., Simpson Township Hill Prairie, limestone glade," 5) "Johnson

Co., near Goreville, mowed lawn," 6) "Johnson Co., Cave Creek, limestone glade," 7) "Jackson Co., near Grand Tower, Devil's Backbone"

Zonitoides nitidus
- Baker: no collections, known from only the northern part of the state
- Hubricht: no records for south eleven cos.
- Hutchison: one collection at "Union Co., Berryville, shale glade" (identification unsure)

HELICARIONIDAE

Euconulus fulvus
- Baker: one collection in south eleven cos., "Union Co., 1 3/4 mi. E of Reynoldsville, floodplain forest" -- widely scattered throughout Illinois
- Hubricht: listed as a fossil in Jackson and Alexander cos.
- Hutchison: did not identify

Euconulus trochulus
- Baker: probably listed as E. chersinus -- collected at 1) "Pope Co., Bay City, Ohio River bluffs," 2) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill," -- generally distributed throughout Illinois
- Hubricht: listed from Pope and Hardin cos.
- Hutchison: did not identify

Guppya sterkii
- Baker - not listed
- Hubricht: listed from Union Co.
- Hutchison: did not identify

HAPLOTREMATIDAE

Haplotrema concavum
- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Fountain Bluff, Trestle Hollow," 3) "Jackson Co., N of Carbondale, Big Muddy River floodplain," 4) "Jackson Co., N of Murphysboro, Beaucoup Creek bottoms,: 5) "Union Co., 3 mi. W of Alto Pass," 6) "Union Co., Bald Knob, in woods," 7) "Union Co., 2 mi. W of Alto Pass, Seminary Creek, valley woodland," 8) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 9) "Pope Co., Bay City, Ohio River bluff," 10) "Pope Co., Golconda, Ohio River bluffs," 11) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 12) "Hardin Co., 4 mi. SE of Gibsonia, Beaver Creek, hilly woodland," 13) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek," 14) "Hardin Co., 1/2 mi. NE of Cave in Rock, woodland" -- found throughout Illinois

- Hubricht: listed from Jackson, Union, Alexander, Pope, and Hardin cos.
- Hutchison: collected at 1) "Johnson Co., Simpson Township Hill Prairie, limestone glade," 2) "Hardin Co., Panther Hollow," 3) "Pope Co., Leisure City, limestone glade," 3) "Hardin Co., Whoopie Cat Mountain, limestone glade," 4) "Johnson Co., near Heron Pond, mowed pasture," 5) "Pulaski Co., N of Olmsted, Chestnut Hills," 6) "Johnson Co., Heron Pond-Little Black Slough, railroad embankment," 7) "Johnson Co., Indian Point, limestone glade," 8) "Jackson Co., S end of Fountain Bluff," 9) "Johnson Co., near Heron Pond, Bird Spring, in woods," 10) "Johnson Co., near Belknap, abandoned limestone quarry," 11) "Johnson Co., Cave Creek, limestone glade," 12) "Union Co., Pine Hills, limestone cliff," 13) "Union Co., State Tree Nursery, Ozark Hills Nature Preserve, wooded ravine," 14) "Johnson Co., Heron Pond, floodplain forest," 15) "Union Co., Berryville, shale glade"

BULIMULIDAE

Rabdotus dealbatus dealbatus
- Baker: listed as Bulimulus dealbatus; collected at one site, "Jackson Co., S end of Fountain Bluff" -- known in Illinois only from Fountain Bluff in Jackson Co.
- Hubricht: listed from Union Co. in south part
- Hutchison: did not find

POLYGYRIDAE

Polygyra leporina
- Baker: collected at 1) "Saline Co., Cave Hill," 2) "Union Co., 8 mi. SW of Anna, in hills," 3) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill" -- reported from the counties of Clark, Randolph, Perry, Jackson, Union, Saline, and Hardin
- Hubricht: listed from Jackson, Union, Saline, and Hardin cos.
- Hutchison: collected at 1) "Hardin Co., Shetlerville, abandoned limestone quarry," 2) "Johnson Co., Heron Pond-Little Black Slough, railroad embankment"

Polygyra dorfeuilliana
- Baker: collected from only one site in south eleven cos., "Jackson Co., S end of Fountain Bluff" -- known in Illinois only from the dry bluffs in Monroe and Jackson cos.
- Hubricht: listed from Jackson co.
- Hutchison: did not find

Stenotrema barbatum
- Baker: may be listed as Polygyra hirsuta; collected at 1) "Union Co., W of Alto Pass," 2) "Hardin Co., 1/2 mi. NE of

Cave in Rock, woodland" -- one of the commonest and most widely distributed snails in Illinois

- Hubricht: listed from Jackson, Union, Gallatin, Hardin, and Pope cos.
- Hutchison: collected at "Johnson Co., Heron Pond-Little Black Slough, floodplain forest"

Stenotrema hubrichti

- Baker: not listed
- Hubricht: Union Co., Illinois is only reported site for sp.
- Hutchison: collected at "Union Co., Pine Hills, limestone cliff"

Stenotrema leai aliciae

- Baker: may be listed as Polygyra monodon; may also include Polygyra fraterna and P. fraterna cava; the following are Baker's collections for Polygyra monodon: 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Fountain Bluff, Trestle Hollow," 3) "Jackson Co., Makanda," 4) "Saline Co., Horton Hill," 5) "Saline Co., Cave Hill," 6) "Union Co., 8 mi. SW of Anna, in hills," 7) "Union Co., W of Alto Pass," 8) "Union Co., 2 mi. W of Alto Pass, Seminary Creek, valley woodland," 9) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 10) "Johnson Co., Schwartz Hill, N of Vienna," 11) "Johnson Co., 7 mi. NNW of Vienna, forested hill," 12) "Pope Co., Golconda, Ohio River bluffs," 13) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 14) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek," 15) "Hardin Co., 3 mi. N of Rosiclare, forested hillside," 16) "Hardin Co., 3 mi. NE of Elizabethtown, wooded hill," 17) "Massac Co., 7 mi. N of Brookport, hilly woodland" -- Polygyra monodon is reported by Baker to be one of the most abundant snails in Illinois but more abundant in the northern part
- Hubricht: listed from Jackson and Hardin cos.
- Hutchison: did not identify; may have confused with Polygyra fraterna

Stenotrema fraternum fraternum

- Baker: probably listed as Polygyra fraterna fraterna; Baker has no collections for Polygyra fraterna fraterna in south eleven cos., but reports it as abundant on the bluffs bordering the Ohio and Mississippi rivers and more common in the southern than northern part of the state (see comments for Stenotrema leai aliciae above)
- Hubricht: listed from all southern eleven cos.except Pulaski
- Hutchison: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Pope Co., Leisure City, limestone glade," 3) "Jackson Co., N of Grand Tower, Devil's Backbone"

Stenotrema stenotrema

- Baker: may be listed as Polygyra stenotrema; collected at one site, "Hardin Co., 1 mi. SW of Elizabethtown, old quarry" -- only Illinois site is at Hardin Co. quarry
- Hutchison: did not find

Mesodon inflectus
- Baker: probably listed as Polygyra inflecta inflecta, P. inflecta media, and/or P. inflecta edentata; the following are Baker collections for each:

Polygyra inflecta inflecta -- no collections in south eleven cos.

Polygyra inflecta media -- 1) "Hardin Co., 3 mi. NW of Elizabethtown, Big Creek valley," 2) "Massac Co., 7 mi. N of Brookport, hilly woodland"

Polygyra inflecta edentata -- "Massac Co., 7 mi. N of Brookport, hilly woodland"

confined largely to the southern part of the state
- Hubricht: listed from all eleven southern cos. except Pulaski
- Hutchison: collections for:

Polygyra inflecta inflecta -- 1) "Hardin Co., Panther Hollow," 2) "Johnson Co., near Heron Pond, Bird Spring, in woods," 3) "Johnson Co., near Belknap, abandoned limestone quarry," 4) "Johnson Co., Simpson Township Hill Prairie, limestone glade," 5) "Johnson Co., Cave Creek, limestone glade," 6) "Johnson Co., near Goreville, mowed lawn," 7) "Union Co., Berryville, shale glade," 8) "Jackson Co., N of Grand Tower, Devil's Backbone"

Polygyra inflecta media -- "Jackson Co., S end of Fountain Bluff"

Polygyra inflecta edentata -- did not find

Mesodon zaletus
- Baker: probably listed as Polygyra zaleta; collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Fountain Bluff, Trestle Hollow," 3) "Jackson Co., N of Grand Tower, river bluff," 4) "Jackson Co., N of Carbondale, Big Muddy River floodplain," 5) "Union Co., 8 mi. SW of Anna, in hills," 6) "Union Co., W of Alto Pass," 7) "Union Co., Bald Knob, in woods," 8) "Union Co., 10 mi. SW of Anna, on hillside," 9) "Pope Co., Bay City, Ohio River bluff," 10) "Pope Co., Golconda, Ohio River bluffs," 11) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek," 12) "Alexander Co., Dongola Hollow hills" -- widely distributed over Illinois but very sporadic; most abundant in the eastern and southern parts of the state
- Hubricht: listed from Jackson, Union, Alexander, Pope, and Hardin cos. in the southern part
- Hutchison: did not identify; may have confused with Polygyra albolabris

Mesodon clausus clausus
- Baker: probably listed as Polygyra clausa; collected at

1) "Jackson Co., S end of Fountain Bluff," 2) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek" -- widely distributed over Illinois

- Hubricht: listed from Jackson, Alexander, and Hardin cos.
- Hutchison: collected at 1) "Johnson Co., Lower Cache River, along highway," 2) "Johnson Co., near Heron Pond, mowed pasture," 3) "Massac Co., near Round Knob, along highway," 4) "Massac Co., near Joppa, along Ohio River bank," 5) "Jackson Co., Giant City State Park, Fern Rocks Nature Preserve," 6) "Johnson Co., near Heron Pond, Bird Spring, in woods," 7) "Jackson Co., N of Grand Tower, Devil's Backbone, limestone bluff"

Mesodon thyroidus

- Baker: probably listed as Polygyra thyroidus; collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Williamson Co., 1 1/2 mi. SW of Stonefort, forested hill," 3) "Saline Co., Horton Hill," 4) "Union Co., 8 mi. SW of Anna, in hills," 5) "Union Co., 3 mi. W of Alto Pass, in valley," 6) "Jackson Co., Giant City State Park, woodland," 7) "Union Co., 3 mi. N of Alto Pass, hilly parkland" 8) "Union Co., 2 mi. W of Alto Pass, Seminary Creek, valley woodland," 9) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 10) "Union Co., near Balcom, railroad embankment," 11) "Union Co., near Cobden, railroad embankment," 12) "Union Co., 1 3/4 mi. E of Reynoldsville, floodplain forest," 13) "Johnson Co., 4 1/2 mi. SW of Vienna, Cache River floodplain forest," 14) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 15) "Hardin Co., 4 mi. SE of Gibsonia, Beaver Creek, hilly woodland," 16) "Hardin Co., 3 mi. NW of Elizabethtown, Big Creek valley," 17) "Hardin Co., 1/2 mi. NE of Cave in Rock, woodland," 18) "Alexander Co., Dongola Hollow hills," 19) "Alexander Co., near Thebes, wooded hill," 20) "Alexander Co., Cairo Point, junction of Mississippi and Ohio rivers, floodplain forest," 21) "Alexander Co., 1 mi. S of Cairo, Mississippi River floodplain," 22) "Alexander Co., N of Cairo, railroad embankment," 23) "Massac Co., 6 mi. NW of Metropolis, swamp near Q Ditch" -- found over most parts of Illinois

- Hubricht: listed from all eleven southernmost cos. except Gallatin and Johnson
- Hutchison: collected at 1) "Union Co., Atwood Ridge," 2) "Johnson Co., Simpson Township Hill Prairie, limestone glade," 3) "Johnson Co., near Belknap, in soybean field," 4) "Johnson Co., Wildcat Bluff, limestone glade," 5) "Hardin Co., Whoopie Cat Mountain, limestone glade," 6) "Massac Co., American Electric Power Co. plant, Halesia Nature Preserve, edge of woods," 7) "Alexander Co., Horseshoe Lake Island, in woods," 8) "Johnson Co., Heron Pond-Little Black Slough, railroad embankment," 9) "Pope Co., near Azotus, Dean Cemetery East, barrens," 10) "Johnson Co., near Heron Pond, Bird Spring, in woods," 11) "Johnson Co., near Belknap, abandoned limestone quarry," 12) "Johnson Co., Cave Creek, limestone glade," 13)

"Union Co., Pine Hills, limestone cliff," 14) "Johnson Co., near Heron Pond, cultivated garden"

Mesodon elevatus

- Baker: probably listed as Polygyra elevata; collected at 1) "Alexander Co., Dongola Hollow hills," 2) "Alexander Co., near Thebes, wooded hill" -- known from only seven cos. in Illinois including Jackson and Alexander
- Hubricht: listed from Jackson and Alexander cos.
- Hutchison: collected at "Johnson Co., Cave Creek, limestone glade"

Mesodon pennsylvanicus

- Baker: probably listed as Polygyra pennsylvanica; no collections in south eleven cos. -- widely distributed over Illinois
- Hubricht: listed from Jackson Co. in the southern part
- Hutchison: did not find

Triodopsis vulgata

- Baker: may be listed as Polygyra fraudulenta; collected at 1) "Union Co., 8 mi. SW of Anna, in hills," 2) "Union Co., 4 mi. SW of Anna, wooded hill," 3) "Union Co., 3 mi. W of Alto Pass, in valley," 4) "Union Co., Bald Knob, in woods," 5) "Union Co., 3 mi. N of Alto Pass, hilly parkland," 6) "Jackson Co., Giant City State Park, woodland," 7) "Union Co., 3 mi. N of Dongola, woodland," 8) "Union Co., 2 mi. W of Alto Pass, Seminary Creek, valley woodland," 9) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 10) "Hardin Co., 4 mi. SE of Gibsonia, Beaver Creek, hilly woodland" -- only in tributary valleys of Wabash, Ohio, and Mississippi rivers
- Hubricht: listed from Jackson, Union, Pope, and Hardin cos.
- Hutchison: collected at 1) "Union Co., Berryville, shale glade," 2) "Pope Co., Wallace Bluff," 3) "Johnson Co., near Heron Pond, Bird Spring, in woods," 4) "Johnson Co., Cave Creek, limestone glade," 5) "Union Co., Pine Hills, limestone cliff," 6) "Union Co., Bald Knob, edge of woods"

Triodopsis discoidea

- Baker: may include Polygyra tridentata tridentata, P. tridentata frisoni, P. tridentata bidentata, P. tridentata unidentata, and/or P. tridentata edentilabris as listed by Baker; the following are collections per subspecies:

Polygyra tridentata tridentata -- no collections in south eleven cos.

Polygyra tridentata frisoni -- collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Fountain Bluff, Trestle Hollow," 3) "Pope Co., 4 mi. W of Golconda, wooded hill," 4) "Pope Co., Bay City, Ohio River bluff," 5) "Pope Co., Golconda, Ohio River bluff," 6) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 7) "Hardin Co., 1 mi. SW of

Elizabethtown, old quarry," 8) "Hardin Co., Cave in Rock," 9) "Hardin Co., 1/2 mi. NE of Cave in Rock, in woods"

Polygyra tridentata bidentata -- collected at one site in south eleven cos., "Hardin Co., 1 mi. NE of Elizabethtown, Ohio Piver bluffs"

Polygyra tridentata unidentata -- collected at 1) "Jackson Co., N of Grand Tower, river bluff," 2) "Jackson Co., Fountain Bluff," 3) "Pope Co., 4 mi. W of Golconda, wooded hill," 4) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluff," 5) "Hardin Co., 1 mi. SW of Elizabethtown, old quarry," 6) "Hardin Co., Cave in Rock"

Polygyra tridentata edentilabris -- collected at 1) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 2) "Hardin Co., 1 mi. SE of Elizabethtown, old quarry"
-- abundant in parts of Illinois, most common in the southern part

- Hubricht: listed from Jackson, Union, Alexander, Pope, and Hardin cos.

- Hutchison collections for:

Polygyra tridentata tridentata -- did not find

Polygyra tridentata frisoni -- 1) "Johnson Co., Indian Point, limestone glade," 2) "Hardin Co., Shetlerville, abandoned limestone quarry," 3) "Massac Co., near Joppa, Ohio River bank," 4) "Johnson Co., near Belknap, abandoned limestone quarry"

Polygyra tridentata bidentata -- did not find

Polygyra tridentata unidentata -- did not find

Polygyra tridentata edentilabris -- "Johnson Co., near Belknap, abandoned limestone quarry"

Triodopsis fosteri

- Baker: probably listed as Polygyra fosteri; collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., 5 mi. E of Carbondale, Crab Orchard Creek valley, open woodland," 3) "Jackson Co., N of Murphysboro, Beaucoup Creek bottoms," 4) "Saline Co., Horton Hill," 5) "Saline Co., Cave Hill," 6) "Union Co., 8 mi. SW of Anna, in hills," 7) "Union Co., 4 mi. SW of Anna, Lake Hill school, woods," 8) "Union Co., 3 mi. W of Alto Pass, in valley," 9) "Union Co., Bald Knob, in woods," 10) "Jackson Co., Giant City State Park, hilly woodland," 11) "Union Co., 3 mi. N of Alto Pass, hilly parkland," 12) "Union Co., 2 mi. W of Alto Pass, Seminary Creek, valley woodland," 13) "Union Co., 1/2 mi. E of Alto Pass, rocky hillside," 14) "Union Co., 1 1/2 mi. N of Alto Pass, hilly woodland," 15) "Union Co., 10 mi. SW of Anna, hillside," 16) "Union Co., 4 1/2 mi. SSE of Anna, near Balcolm, railroad embankment," 17) "Union Co., near Cobden, railroad embankment," 18) "Johnson Co., 4 1/2 mi. SW of Vienna, Cache River floodplain woods," 19) "Pope Co., Golconda, Ohio River bluffs," 20) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek" -- common on the limestone bluffs of the Ohio and Mississippi rivers

- Hubricht: reported from all eleven southernmost cos. except Pulaski and Massac

- Hutchison: collected at 1) "Alexander Co., Ozark Hill Prairies, loess hill prairies," 2) "Monroe Co., Fults Hill Prairie, limestone bluff," 3) "Hardin Co., Shetlerville, abandoned limestone quarry," 4) "Saline Co., Eldorado, mowed lawn," 5) "Alexander Co., Clear Creek Swamp, edge of cypress swamp," 6) "Jackson Co., Giant City State Park, Fern Rocks Nature Preserve," 7) "Johnson Co., Indian Point, limestone glade," 8) "Johnson Co., Cave Creek, limestone glade," 9) "Alexander Co., Opossum Trot Trail, in woods," 10) "Johnson Co., Cedar Bluff, sandstone cliff," 11) "Randolph Co., Swayne Hollow, sandstone bluffs" (may be confused with P. appressa)

Polygyra appressa

- Baker: collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Fountain Bluff, Trestle Hollow," 3) "Saline Co., Horton Hill," 4) "Union Co., 3 mi. W of Alto Pass, in valley," 5) "Union Co., Bald Knob, in woods," 6) "Union Co., near Balcolm, railroad embankment," 7) "Union Co., near Cobden, railroad embankment," 8) "Pope Co., Bay City, Ohio River bluff," 9) "Hardin Co., 1 mi. NE of Elizabethtown, Ohio River bluffs," 10) "Hardin Co., 1 mi. SW of Elizabethtown, old quarry," 11) "Hardin Co., Cave in Rock," 12) "Hardin Co., 3 mi. NW of Elizabethtown, valley of Big Creek," 13) "Alexander Co., 1 mi. S of Cairo, Mississippi River floodplain"
- Hubricht: not listed; may be included with Triodopsis fosteri
- Hutchison: collected at 1) "Randolph Co., Swayne Hollow, sandstone bluffs," 2) "Jackson Co., N of Grand Tower, Devil's Backbone, limestone bluff" (may be confused with Triodopsis fosteri

Triodopsis multilineata

- Baker: probably includes Polygyra multilineata multilineata, P. multilineata alba, and/or P. multilineata rubra as listed by Baker; two collections for Polygyra multilineata listed: 1) "Alexander Co., Cairo Point, junction of Mississippi and Ohio rivers, floodplain forest," 2) "Alexander Co., 1 mi. S of Cairo, Mississippi River floodplain" -- more abundant in northern than in southern Illinois but has been collected near Cairo in Alexander Co.
- Hubricht: listed from Alexander Co.
- Hutchison: did not find

Triodopsis alleni

- Baker: may be listed as Polygyra albolabris alleni; collected at 1) "Jackson Co., S end of Fountain Bluff," 2) "Jackson Co., Fountain Bluff, Trestle Hollow," 3) "Jackson Co., N of Grand Tower, river bluff," 4) "Massac Co., 6 mi. NW of Metropolis, swamp near Q Ditch" -- confined to the southern part of the state
- Hubricht: listed from Jackson and Alexander cos.
- Hutchison: collected at 1) "Pope Co., Gyp Williams

Hollow," 2) "Massac Co., American Electric Power Co. plant, Halesia Nature Preserve, edge of woods," 3) "Union Co., State Tree Nursery, Ozark Hills Nature Preserve, in woods"

Polygyra albolabris dentata listed but not collected by Baker; Hutchison collected at 1) "Alexander Co., Ozark Hill Prairies, loess hill prairies," 2) "Union Co., Atwood Ridge, in woods," 3) "Johnson Co., near Heron Pond, Bird Spring, in woods," 4) "Union Co., Pine Hills, limestone cliff," 5) "Johnson Co., Heron Pond, floodplain woods;" P. albolabris dentata not listed by Hubricht

Allogona profunda

- Baker: may be listed as Polygyra profunda; fossils collected at one site in south eleven cos., "Jackson Co., N of Grand Tower, river bluff," -- confined to northern part of the state, but fossils are often found in southern Illinois
- Hubricht: listed as a fossil in Jackson and Alexander cos.
- Hutchison: collected fossils at 1) "Alexander Co., Ozark Hill Prairies, loess hill prairies," 2) "Jackson Co., Horseshoe Bluff, in woods"

MISCELLANEOUS COLLECTIONS OF AQUATIC SPECIES

Planorbis trivolvis

- Hutchison: collected at "Johnson Co., Heron Pond, on stumps and logs in swamp"

Vivipara sp.

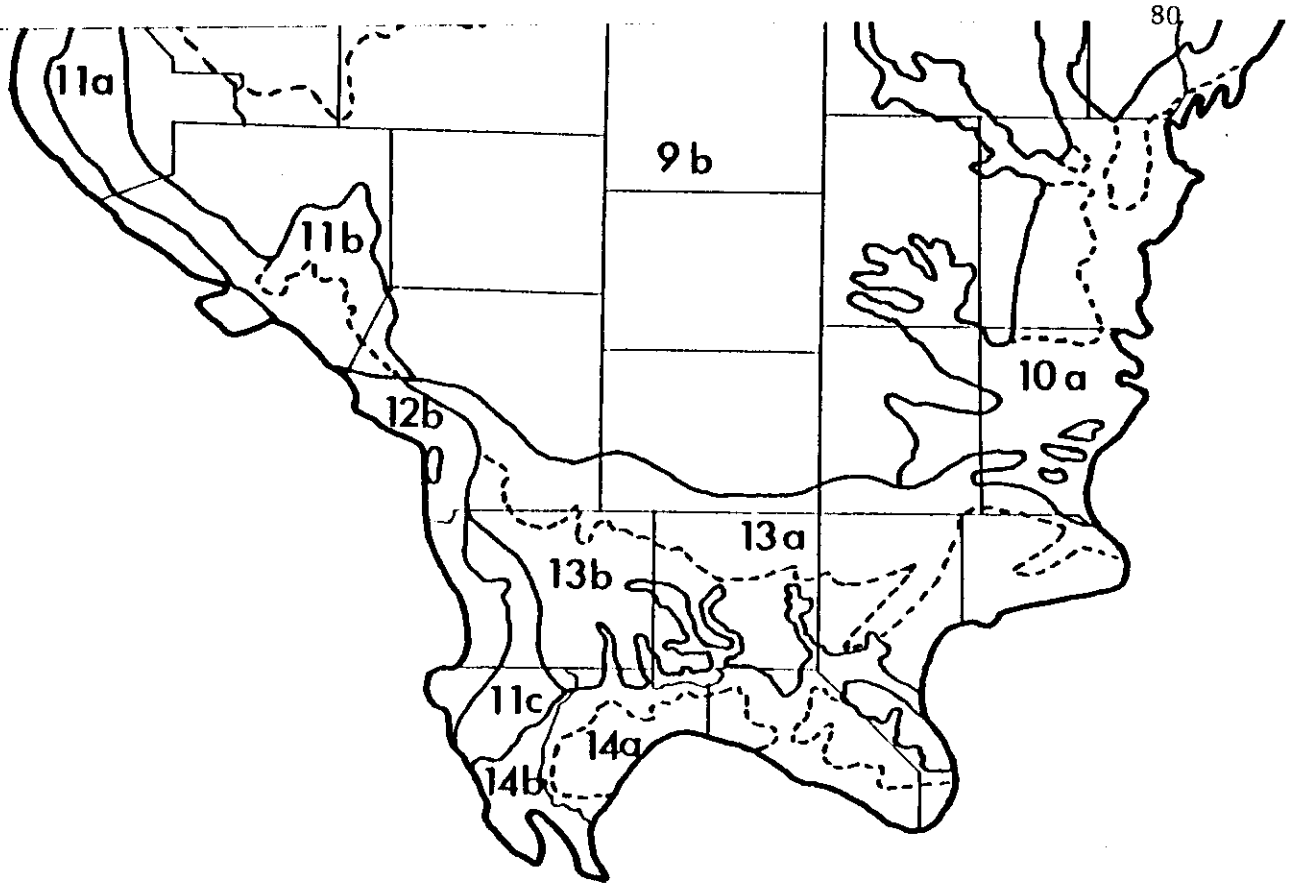
- Hutchison: collected at "Pulaski Co., Section 8 Woods, in dried slough"

Physa gyrina

- Hutchison: collected at "Johnson Co., near Heron Pond, dried slough"

Physa heterostropha

- Hutchison: collected at "Johnson Co., near Heron Pond, dried slough"



9	Southern Till Plain Division a Effingham Plain Section b Mt Vernon Hill Country Section
10	Wabash Border Division a Bottomlands Section b Southern Uplands Section c Vermilion River Section
11	Ozark Division a Northern Section b Central Section c Southern Section
12	Lower Mississippi River Bottomlands Division a Northern Section b Southern Section
13	Shawnee Hills Division a Greater Shawnee Hills Section b Lesser Shawnee Hills Section
14	Coastal Plain Division a Cretaceous Hills Section b Bottomlands Section

FIGURE 11. Natural Divisions of southern Illinois map copied from the Comprehensive plan for the Illinois Nature Preserves System, Part 2-- The Natural Divisions of Illinois, Illinois Nature Preserves Commission, Rockford, 1973

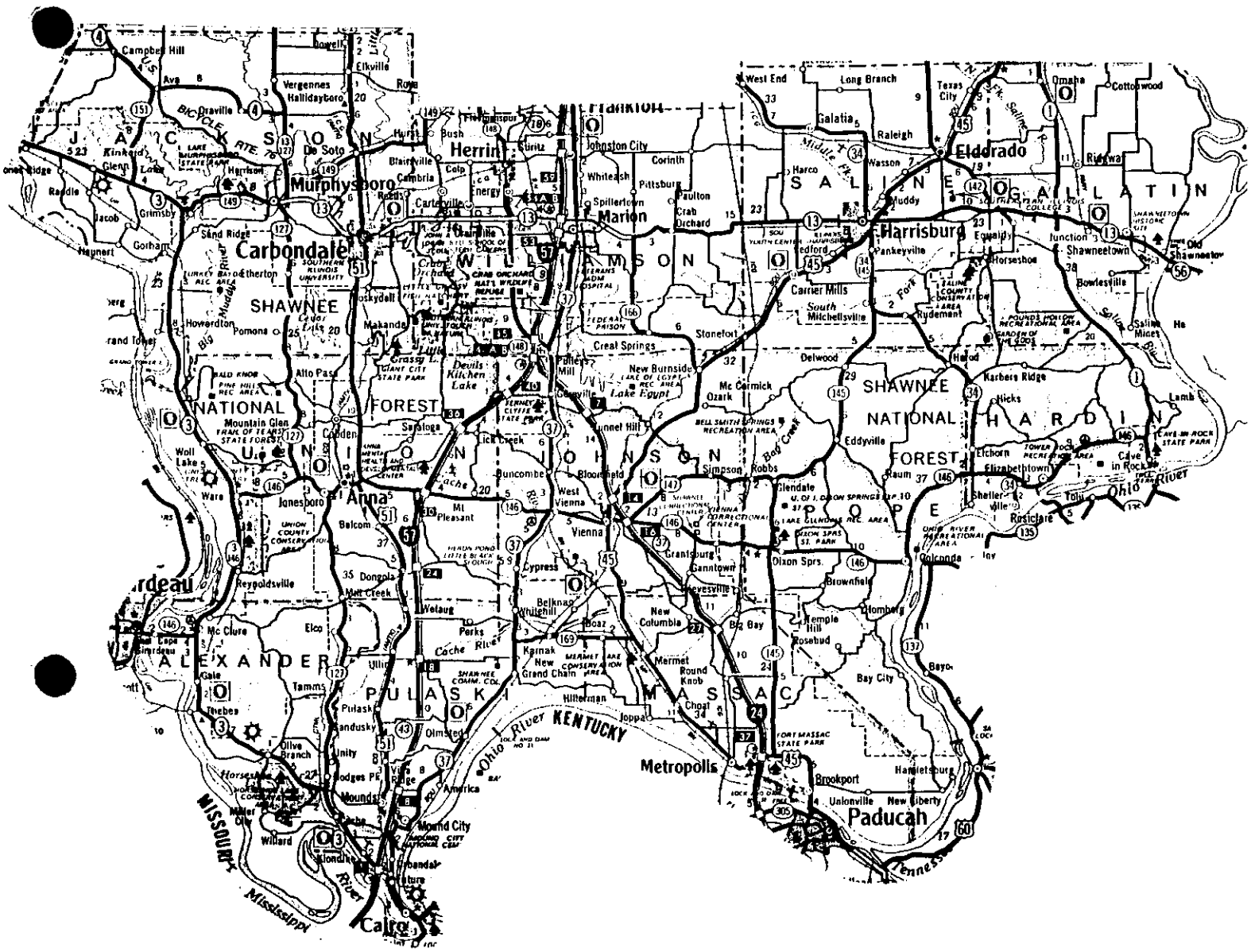


FIGURE 12. Copy of part of Illinois Official Highway Map, 1987-88, showing eleven southernmost counties

FIGURE 10. Collecting sites for land snails by M. Hutchison, 1980-89 on copy of Landforms of Illinois map by J. A. Bier, University of Illinois, 1980

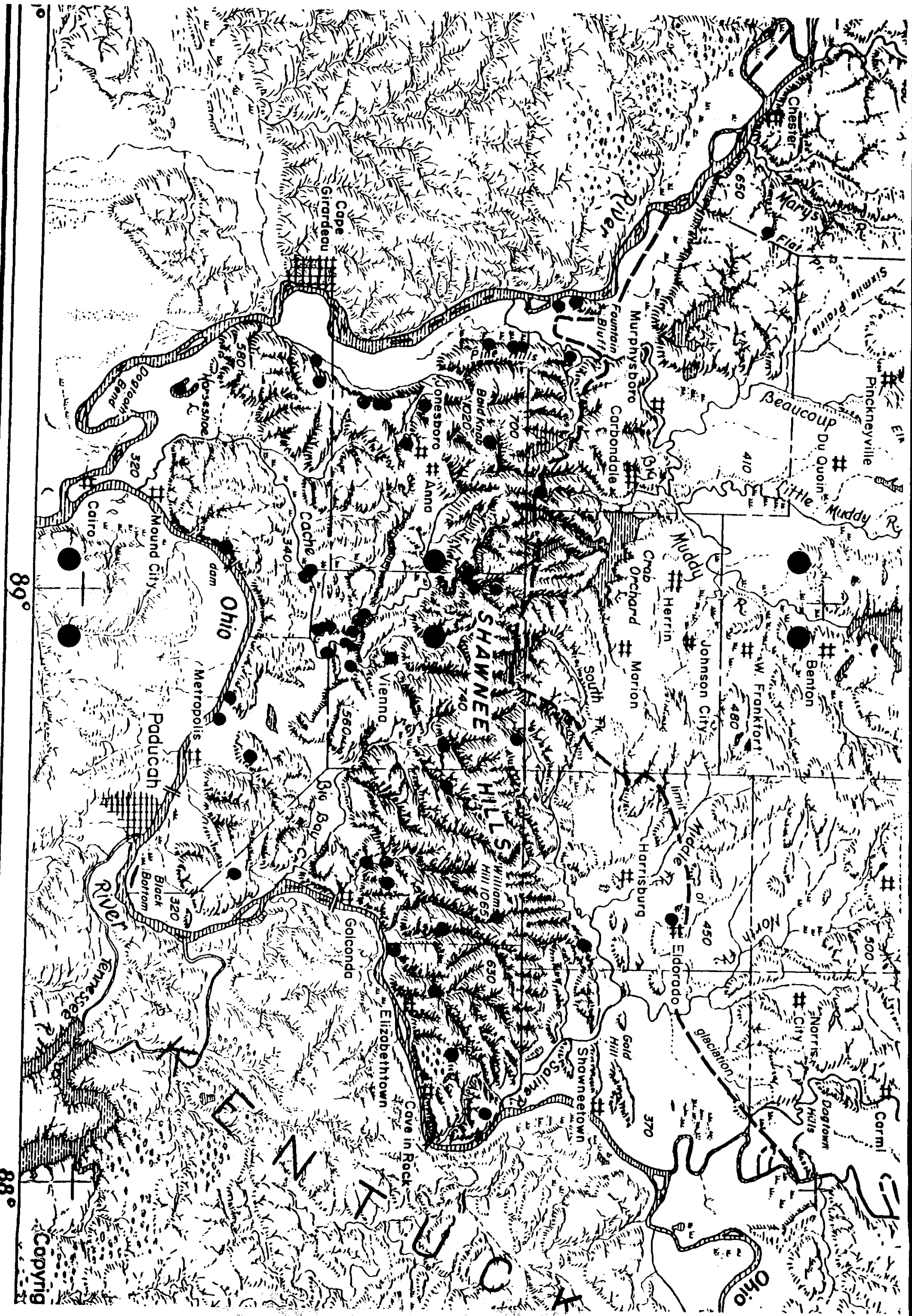
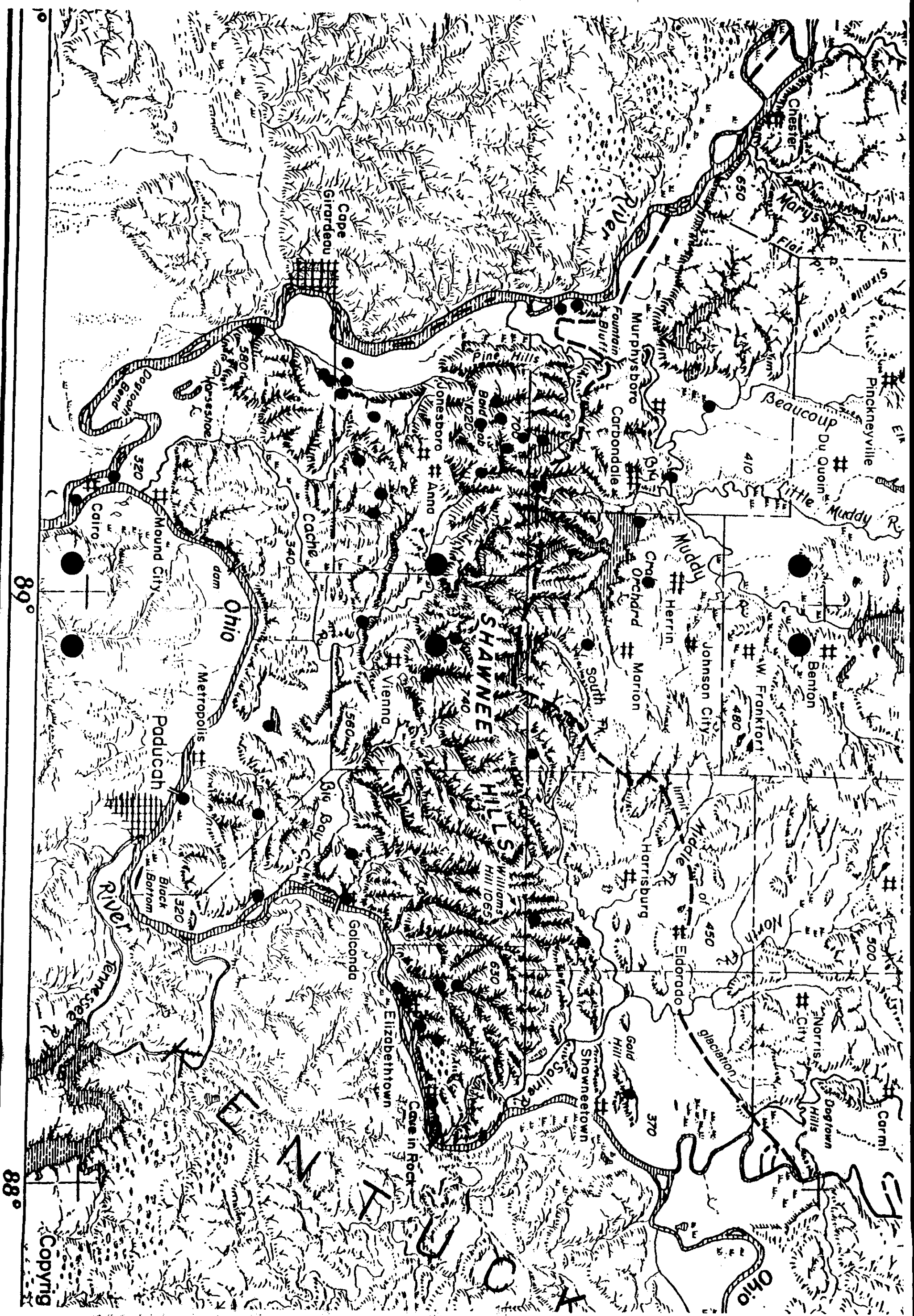



FIGURE 9. Collecting sites for land snails by Dr. Frank Baker (1939) on copy of Landforms of Illinois map, J. A. Bier, University of Illinois, 1980