

# **Class Insecta**

**hemimetabolous insects**

**Order Odonata**  
**dragonflies and damselflies**



Macromiidae

Libellulidae

In. Allen Co.  
2 mi. n. Leo  
x - 3 - 37



LAUS EARHAT  
ODONATA  
KENT COUNTY

# **Order Orthoptera**

**grasshoppers, crickets, katydids,  
walking sticks, cockroaches**

**short-horned grasshoppers**  
**green katydids**

ORTHOPTERA

Acrididae

Tettigoniidae



Co.  
ix  
97

In  
Allen  
Co.

Park  
e Twp.  
1993

ORTHOPTERA  
Acrididae

Co.  
ne  
7

Allen Co  
New Haven  
5-97 to

ORTHOPTERA

Acrididae



Tettigoniidae





RTHOR  
Muskley on 5/17/24

Park  
2-1993

Joe  
New Haven  
.97

**crickets**

Gryllidae

Allen Co.  
Wayne  
1997  
collector

In Allen Co.  
For Wayne  
IX-20-97

Allen Co.  
Wayne  
ix-20-97  
collector

Hagerman  
Iceland  
VI 27 1993

Allen Co.  
Wayne  
ix-20-97  
collector

L6-11-11  
10/11/11

ORTHOPTERA  
KENT COUNTY

Order: Orthoptera  
Family: Gryllidae

Amy Green  
6/2/10  
GWSU Spring Field  
Habitat

Number 115  
11/11/11





Gryllidae

Hagar H VI - 29

Laurie Farhart Orthoptera

Orthoptera / M 26-12-11-0

Order Orthoptera Family Gryllidae

In. Fort Wayne VIII 27-97

In. Fort Wayne IX 20-97

In. Fort Wayne IX 20-97

In. Fort Wayne VIII 27-97

In. Fort Wayne VIII 27-97

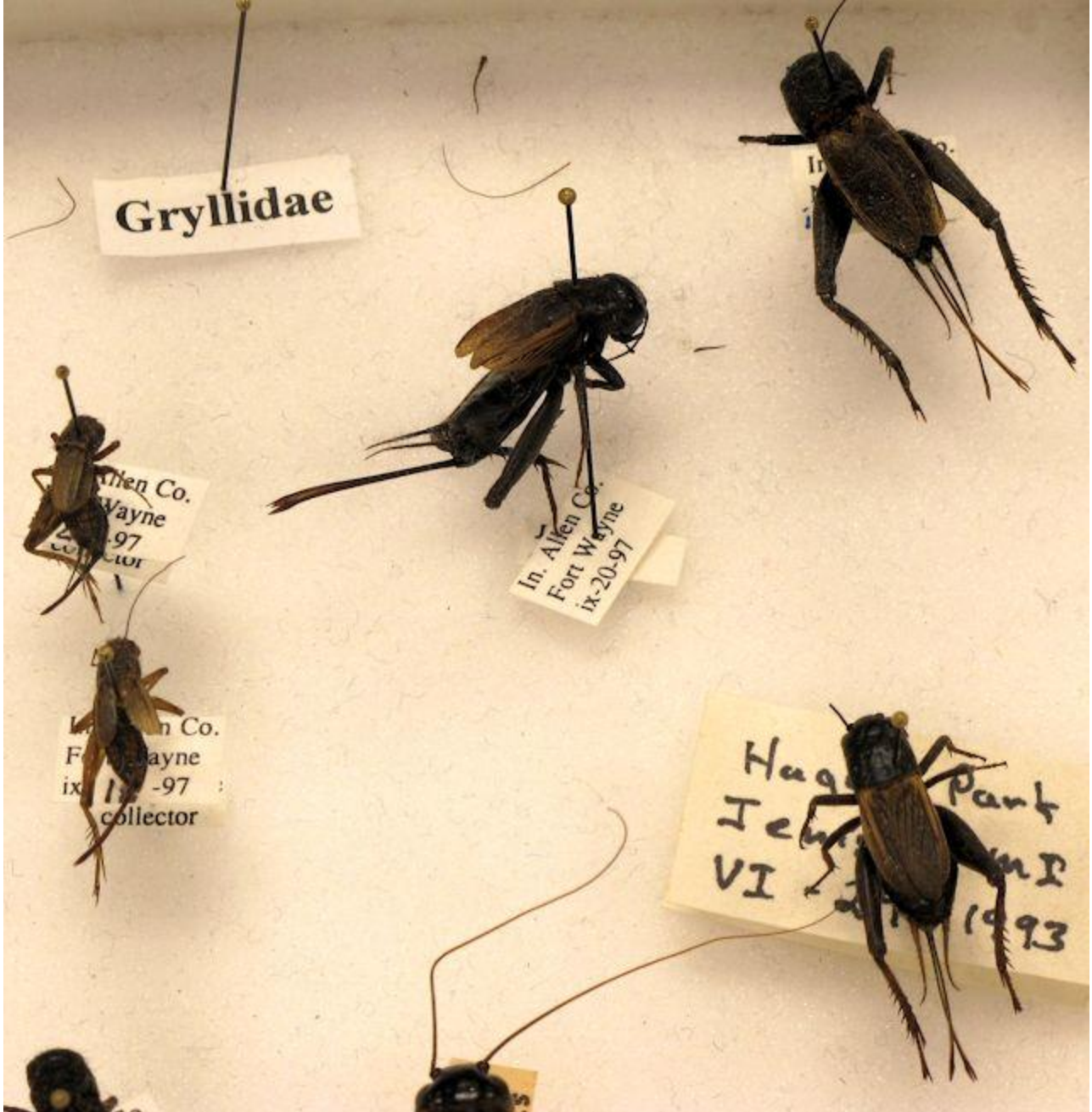
Gryllidae

Allen Co.  
Wayne  
ix-97  
collector

In. Allen Co.  
Fort Wayne  
ix-20-97

In Co.  
Wayne  
ix-97  
collector

Hughes Park  
Irvine  
VI  
1993





Hagg Park  
Jewell  
VI - 29  
1993

771

THOPTERA  
COUNT

**tree crickets**

Oecanthinae



Grilliidae: Oecanthinae  
Subfamily: Oecanthinae  
V Otawa Co. MI  
14 Sept. 2001  
AD Faber



In. Allen Co.  
Wayne  
28-97  
iii



For Co.  
viii  
ne  
Aug 29 97  
woffi



IN:AD  
L.P.P.  
viii



In. Allen Co.  
New  
ix-4-97



Grill 6898 Ivarest  
S.K. O.  
V AD Faber  
2001



Grill Cottonwood  
Su. 17029  
MI  
17  
2001  
viii

GVSU Meadows Golf Course  
GVSU, Allen Co., MI  
14, Sept. 2001  
P. Roth



In. Allen  
From  
viii-31-97

Allen Co.  
Wayne  
viii-28-97  
Collector

viii-26  
IN: Allen Co.  
Jodie

GVSU Meadows Golf Course  
GVSU, Allendale  
14, Sept. 2001  
P. Roth

Oecanthinae

Grillidae  
West Campus Dr.  
Ottawa Co. MI  
14 Sept 2001  
AD Faber

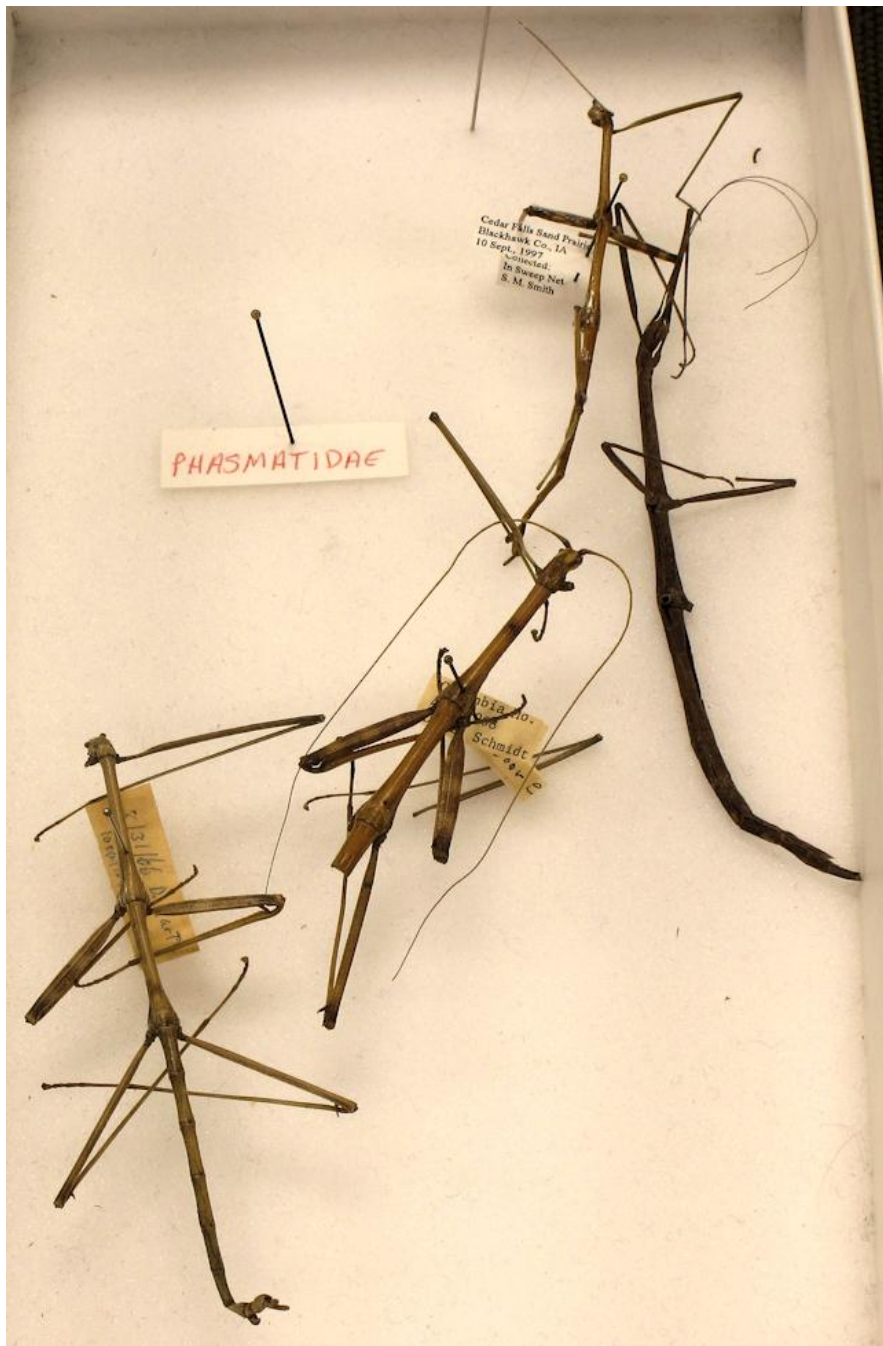
Grillid  
Sub  
Swe  
AD Faber  
AD raver

In.  
New H.  
ix-4-97

Grillid  
Sub  
Fo. 7829 Cottonwood  
Ottawa Co. MI  
7 Sept 2001  
Faber



**walking sticks**



PHASMATIDAE

Cedar Falls Sand Prairie  
Blackhawk Co., IA  
10 Sept. 1997  
collected  
In sweep net  
S. M. Smith

Phidippus  
Schmidt  
1997

Phidippus  
Schmidt  
1997



Color Photo  
Phasmatidae  
13 Sept. 2007  
E. H. S.

Color Photo  
Phasmatidae  
13 Sept. 2007  
E. H. S.

Color Photo  
Phasmatidae  
13 Sept. 2007  
E. H. S.

PHASMATIDAE

**cockroaches**





**Order Homoptera**  
**cicadas, treehoppers**



MEMBRACIDAE

Sand F  
Blackha... A  
10 Sept, 1997

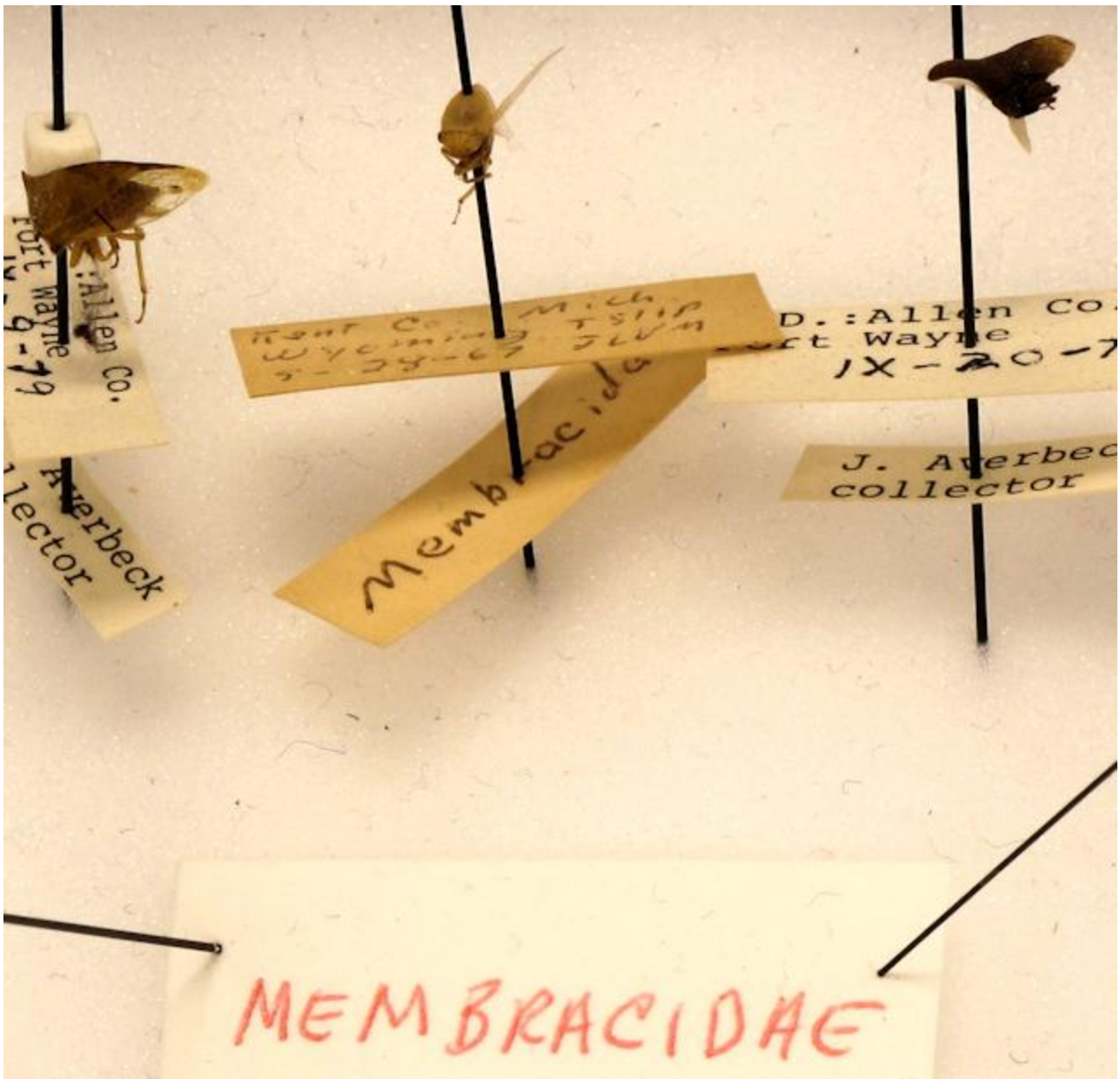
Handwritten notes on a yellow sticky note, including the name "W. ...".



CICADIAE



**treehoppers**



Fort Wayne  
Allen Co.  
9-19

Averbeck  
lector

Fort Co. Mich.  
Wyoming TSLIP  
5-28-67 JLVH

Membracida

D.:Allen Co.  
Fort Wayne  
IX-20-7

J. Averbeck  
collector

MEMBRACIDAE







**Order Hemiptera**  
**true bugs**

**giant water bugs  
(toe biters)**



IND.: Allen Co.  
~~Cedar~~ Cedar  
F. X-2-1981

GIANT WATER BUGS



giant water bug and water striders

BELOSTOMATIDAE

GERRIDAE





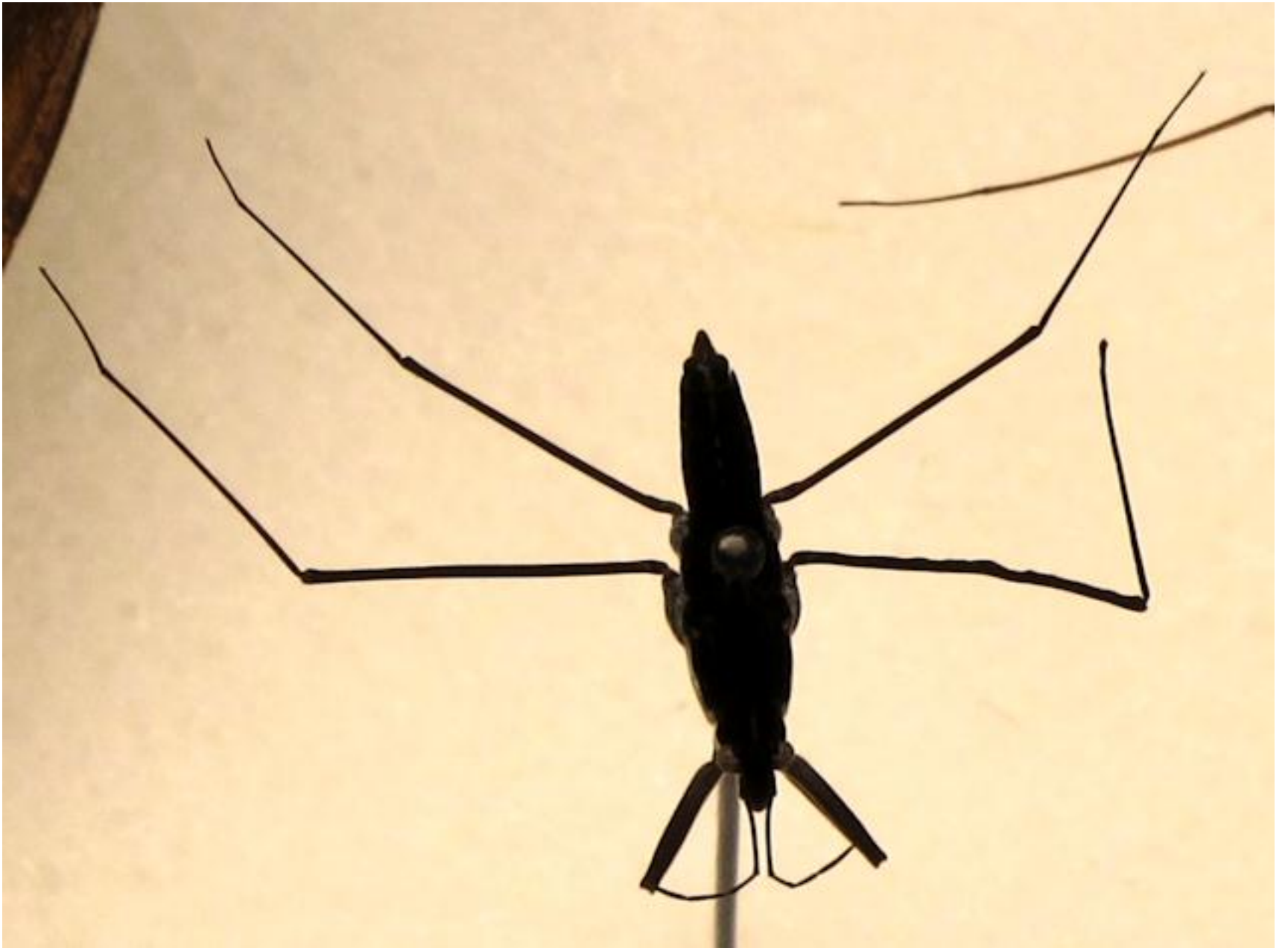
KENT  
CANNON TUSK  
8-7-65 HENPAILL

KENT  
CANNON TUSK  
8-7-65 HENPAILL

GERRIDAE

BELOSTOMATIDAE

**water striders**





**stink bugs**



PENTATOMIDAE

Rachford, Ia.  
Hawk Co., IA  
1992

11/17

Falls, Ia.  
Hawk Co.  
22 1967



Cedar Falls, Ia.  
IX. 22 1927

1/17/71

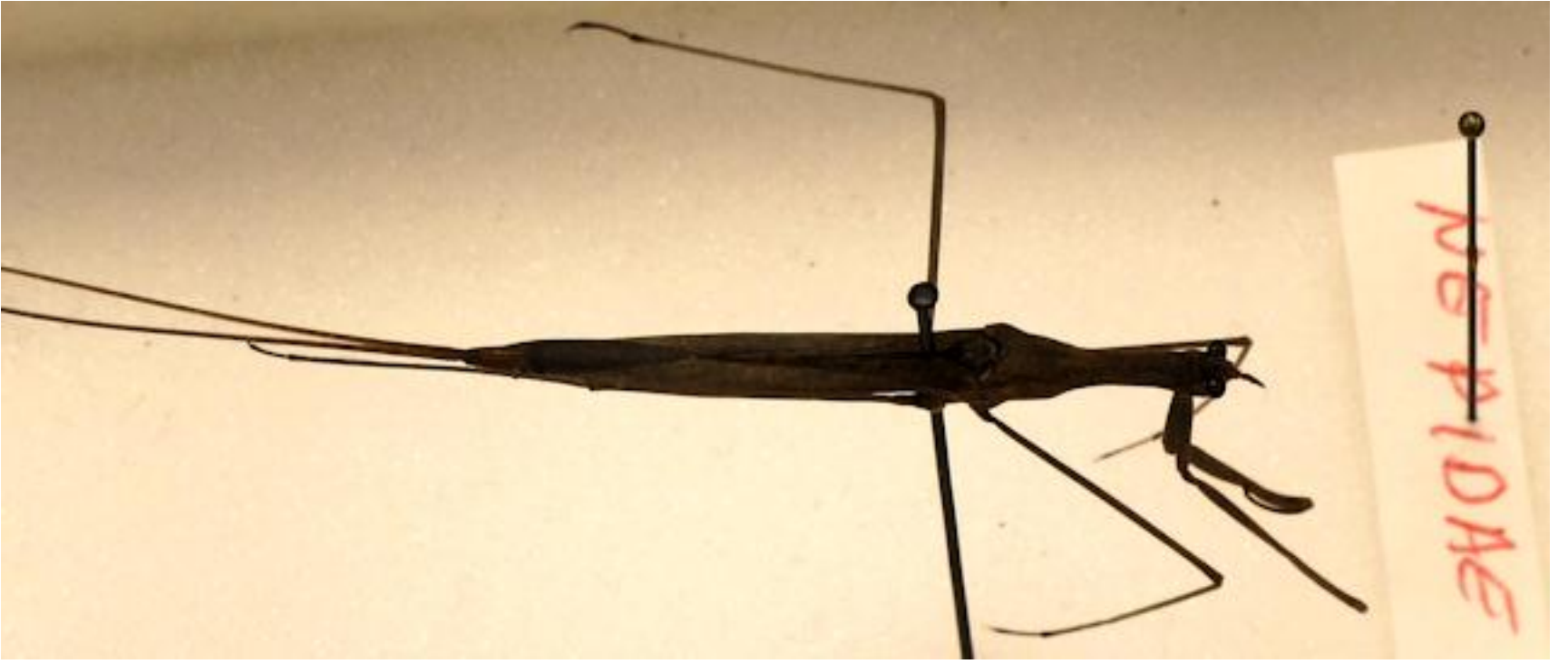
Back of IA  
feet  
(6, 5)

PENTATOMIDAE



**water scorpions**





NEPTIDAE

**Order Anoplura**  
**sucking lice**

***Pediculus humanus***



**holometabolous insects**

**Order Neuroptera**  
**nerve-winged insects**  
**green lacewings**

NEUROPTERA

CHRYSOPIDAE



Blackhawk Co. Ia  
31 Aug 1902

66<sup>th</sup> St. Angor  
Van Buren Co., MI  
13, Oct, 1900  
Cressida Overtton  
Cressida communis



Blackhawk Co. Ia  
31 Aug 1902



Chrysopidae

Blackhawk Co. Ia  
31 Aug 1902



Chrysopidae

Blackhawk Co. Ia  
31 Aug 1902



Chrysopidae





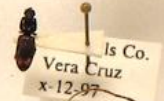
County  
ville, Ind  
snyder

**Order Coleoptera**  
**beetles**

**tiger beetles and ground beetles**

Coleoptera

Carabidae



CICINDELIDAE



COLEOPTERA  
CARABIDAE  
KENT COUNTY



**tiger beetles**



CICINDELIDAE  
CICINDELA SEXPUNCTATA  
HUNTER  
1-15-93

CICINDELIDAE  
CICINDELA SEXPUNCTATA  
HUNTER  
1-15-93



**ground beetles**

# Carabidae





**whirligig beetles**

# Gyrinidae



I...ams Co.  
D...at, 6 mi. W.  
X-31-1981  
Collector



I...n Co.  
C... Creek r  
X-6







**stag beetles**



LUCANIDAE



Lucanidae  
Collected at  
410 4th Street  
Tama Co., IA  
Wigles  
1 Sept., 1997



# **Japanese beetle**

**Scarabaeidae**



689 West  
Ottawa Co. MI  
29 Sept 2001  
AD Faber  
AD Faber



66<sup>th</sup> St., Bangor  
Van Buren Co., MI  
Oct., 2000  
Overton



In. Allen  
Fort Wayne  
viii-28-97  
collector



In. Allen  
Fort Wayne  
viii-30-97



In. Allen Co.  
Fort Wayne  
viii-28-97  
collector



In. Allen Co.  
Fort Wayne  
ix-1-97



In. Allen Co.  
Fort Wayne



**Scarabaeidae**

66  
Van... Co., MI  
13, Oct 1900  
Creela Overton

AD R. Sep 1900  
Van...

In. Allen  
J. Fort Wayne  
viii-28-97

In. Allen Co.  
Fort Wayne  
viii-27-97  
Krusse  
ctor

In. Allen  
R. Fort Wayne  
viii-27-97

In. Allen Co.  
Fort Wayne  
ix-

In. Allen Co.  
Fort Wayne  
viii-27-97



In Co.  
Fo the  
viii 1997  
collector



**click beetles**

# Elateridae

In. A Co.  
Fort Wayne  
ix- 15-97  
Ron  
collector

OTTAWA MICH.  
CVSC  
R. Noyan 5-21-61



Elateridae  
Kent Co. Mich.  
W. C. M. T. S. H. P.  
1-26-97

In. A Co.  
2 mi. Leo  
X - 5 - 97



IN.: A Co.  
L.P.F.W.  
X-7-96





**ladybird beetles**

**Coccinellidae**

In. Co.  
Fort Wayne  
viii-21-97

In. Co.  
Fort Wayne  
ix-8-97  
collector

In. Co.  
Fort Wayne  
xi-27-97

In. Co.  
Fort Wayne  
ix-24-97

In. Co.  
Fort Wayne  
xi-27-97

In. Co.  
Vera Cruz  
viii-26-97

66<sup>th</sup> St.,  
Van Buren Co., MI  
13, Oct., 2000  
Creela Overton

NE McCost Cam  
15 NOV. 2000  
AD Faber  
Coccinellidae  
17-91-5  
NMI  
Ten Park 67

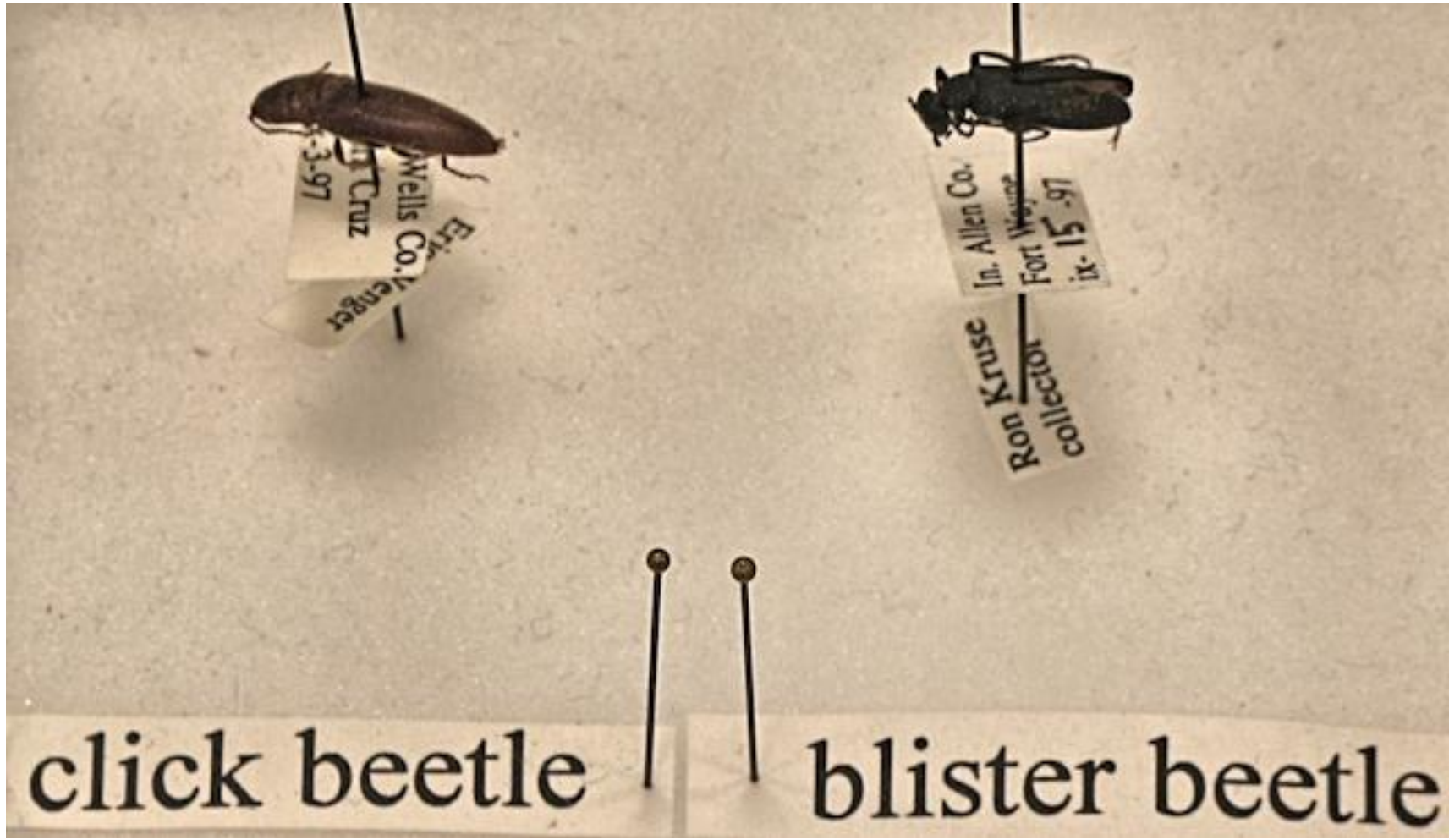
Coleoptera "nty."  
Coccinellidae

**blister beetles**

# Meloidae







Erik Wenger  
Wells Co. Cruz  
3-3-97

Ron Kruse  
collector  
In. Allen Co.  
Fort Wayne  
ix-15-97

click beetle

blister beetle

**long-horned wood boring beetles**

In. A  
Fort  
ix-1  
coll



In.  
Fort  
ix-1



Cerambycidae



28<sup>th</sup> Park  
Georgia  
VI-2-93

28<sup>th</sup> Park  
Georgia  
VI-2-93



**leaf beetles**

Chrysomelidae

In. Allen Co.  
Fort Wayne  
ix-8-97

In. Allen Co.  
Fort Wayne  
ix-8-97

In. Allen Co.  
Fort Wayne  
ix-8-97

In. Allen Co.  
Fort Wayne  
x-19-97

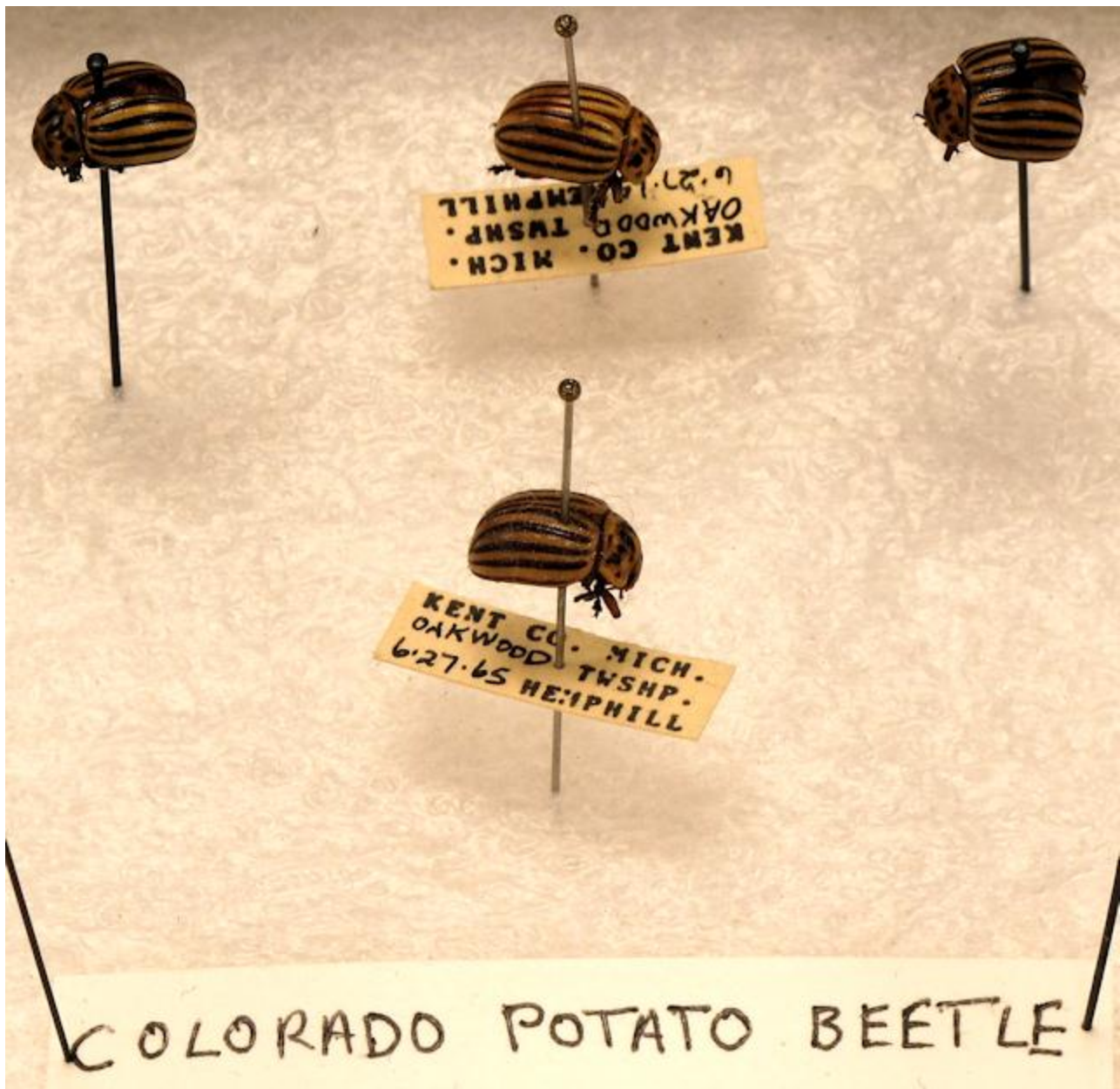
MICH.  
SHP.  
PHILL

J.C. Money  
Coll.  
Bellefontaine  
W-2

Chrysomelidae  
more  
found - Knapp

MICH.  
SHP.  
PHILL

# **Colorado potato beetle**



KENT CO. MICH.  
OAKWOOD TWSHP.  
6.27.65 HE:PHILL

KENT CO. MICH.  
OAKWOOD TWSHP.  
6.27.65 HE:PHILL

COLORADO POTATO BEETLE



# **Order Hymenoptera**

## **ants, bees and wasps**

**ichneumon wasps**

ICHNEUMONIDAE



OTTAWA CO. MICH.  
CASCADIA  
1978



Kato's Greenbelt  
Blackhawk Co., IA  
17. Sept 1997



OTTAWA CO. MICH.  
CASCADIA  
1978



KENT CO. MICH.  
OAKFIELD  
6-11-65



Hymenoptera  
Ichneumonidae



Katos Greenbelt  
Blackhawk Co., IA  
17, Sep 1997

**green metallic bees**  
**sweat bees**

HALICTIDAE



In. Allen  
Fort Wash  
48-19-97



Tuc... Mo.  
Calla... 1968  
June 23  
5



OTTAWA CO  
4/20/68  
MCK



Handwritten label for the left specimen:  
F. H. M.  
4/20/1968  
F. H. M.

Printed label for the middle specimen:  
No. 1968  
June 2, 1968  
Prairie  
No. 1968

Printed label for the right specimen:  
No. 1968  
June 2, 1968  
Prairie  
No. 1968







**horntails**

SIRICIDAE



Muskogee  
21 Sept. 2000  
M.J. Butth  
M.J. Butth



Muskegon Wastewater  
Muskegon County, MI  
21 Sept. 2000  
M.J. Both

Collected on: trunk of maple - Ash  
M.J. Both



Sept 1998



Sept 1998  
Mendate



Sept 1998  
Mendate

SICKLEDAE

**yellowjackets, honey bees,  
and bumble bees**

HYMENOPTERA



VESPIDAE

APIDAE





HYMENOPTERA

VESPIDAE

APIDAE



**yellowjacket**



**honey bee**



**bumble bee**





**ants**

FORMICIDAE  
IN. Allen Co.  
x-1-97



IN.: Madison Co.  
Indianapolis  
x-1-1994  
collector



FO...  
x-1-97



OTTAWA MICH.  
G.V.S.C.  
x-1-97



OTTAWA MICH.  
G.V.S.C.  
x-1-97



KENT CO. MICH.  
G.R.  
x-2-65 HENPHILL



In. Allen Co.  
Wayne  
x-3-97



In. Allen Co.  
Wayne  
x-3-97



OTTAWA MICH.  
G.V.S.C.  
x-1-97



KENT CO. MICH.  
G.V.S.C.  
x-1-97



KENT CO. MICH.  
G.V.S.C.  
x-1-97













**Order Diptera**  
**true flies**

**flower flies**

DIPTERA

Syrphidae



In. Dea. Co.  
5m. nw Water.  
ix-14-97  
collector



Grand... Park  
O... MI  
22 Sept 2000  
AW Albaitis



In. Allen Co.  
New Haven  
Joe Fort  
collector





In. Dek. Co.  
New Haven  
ix-23-97



x



In. Allen Co.  
New Haven  
coll ix-23-97



In. Dek. Co.  
5m. nw. Water  
Ron Ki collect  
ix-14-97







New  
en  
5-22-97

Co.

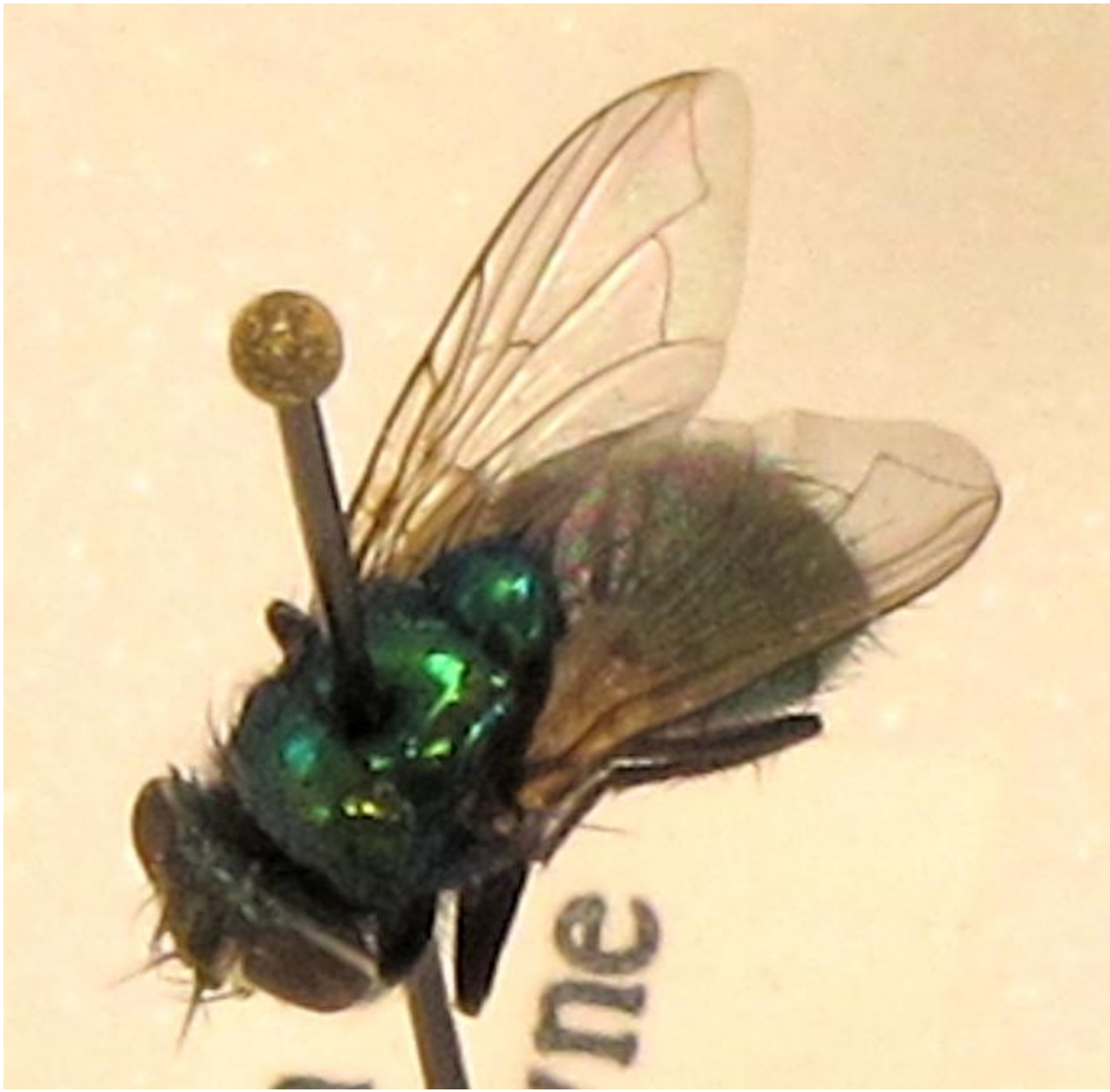
a



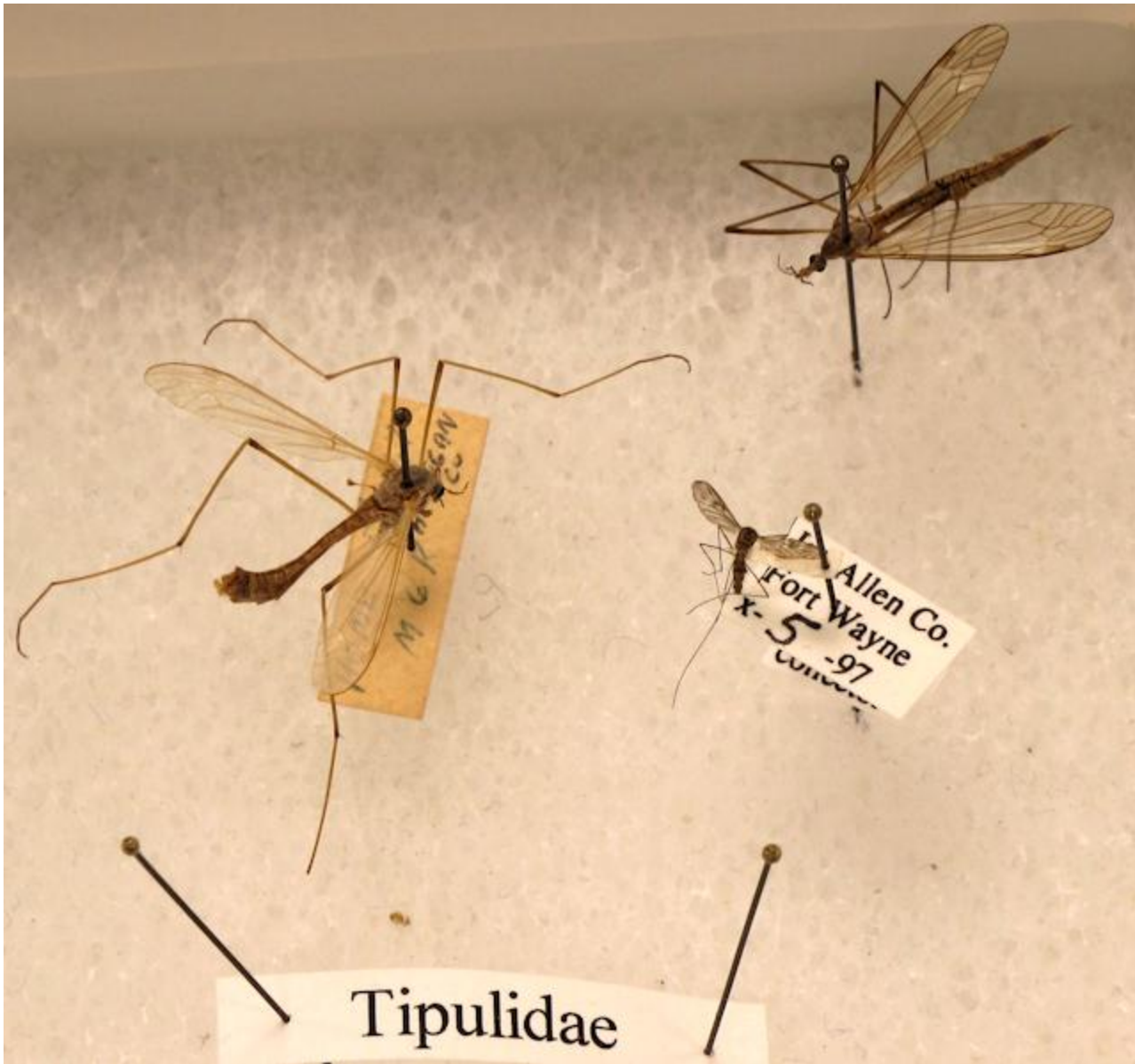
**blow flies**

# Calliphoridae





**crane flies**



Tipulidae

Allen Co.  
Fort Wayne  
x-5 -97  
Collected

M. C. P. ...  
Allen Co.



**Order Lepidoptera**  
**butterflies and moths**



PAPILIONIDAE

SATURNIIDAE

SPHINXIDAE

PAPILIONIDAE

PAPILIONIDAE

SATURNIIDAE

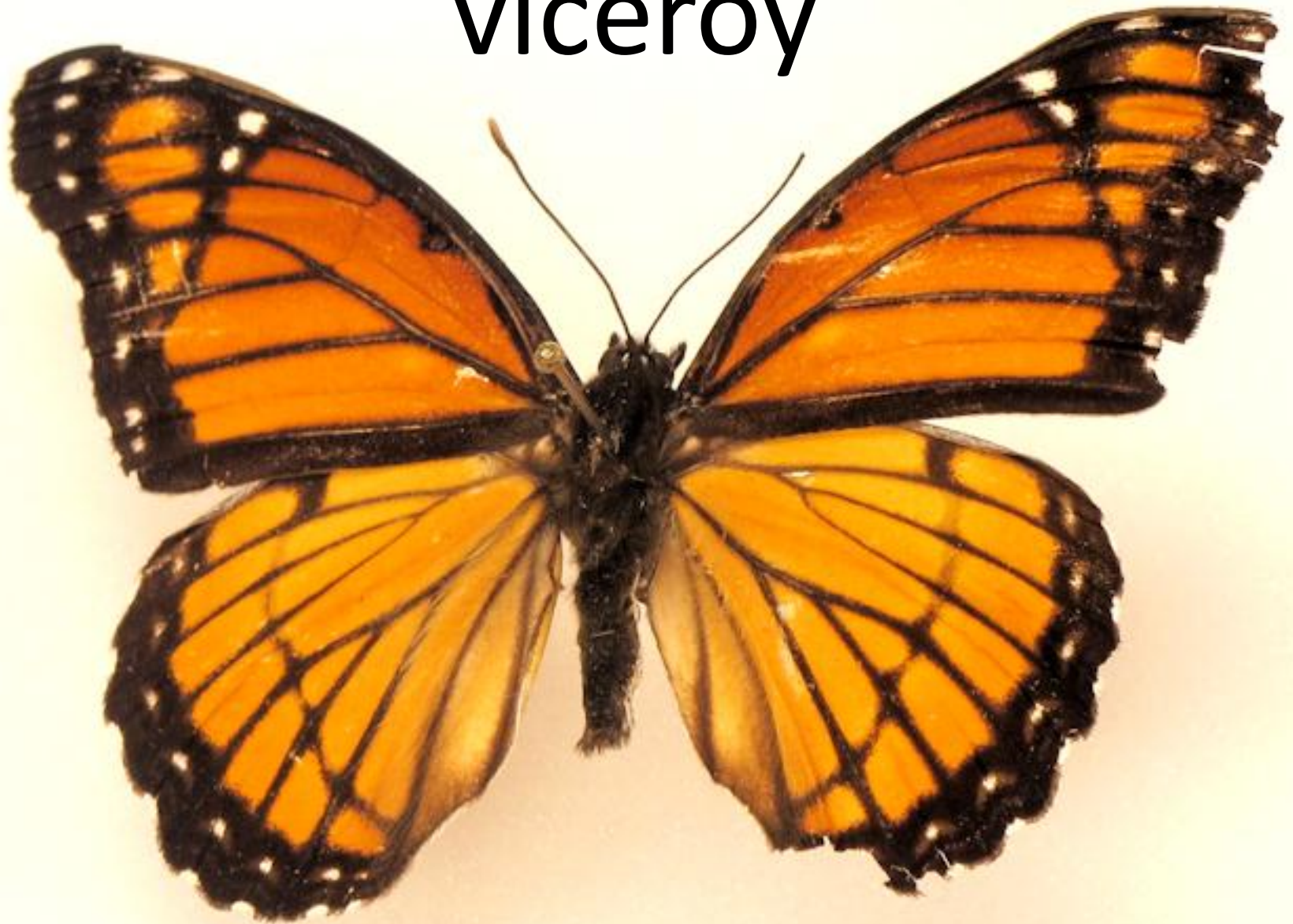
DANAIDAE



monarch

**brush-footed butterflies**

viceroy





NYMPHALIDAE

**sulfurs**



**tent caterpillars**



**swallowtails**





**giant silkworm moths**



SATURNIIDAE

**sphinx or hawk moths**





**Order Siphonaptera**

fleas

***Xenopsylla cheopis***

