

Some specialists of freshwater inverts were: Henry Barbour (HB), Frances Garretson (FG), Brian Reid (BR), Doug Smith (DS), Bryan Windmiller (BW).

Phylum Porifera		SPONGES	
Spongillidae		Freshwater Sponge	
Anheteromeyenia ryderi ?	__ Freshwater Sponge		DS
Eunipius fragilis	__ Freshwater Sponge		DS
Spongilla lacustris	__ Freshwater Sponge		DS
Phylum Annelida		SEGMENTED WORMS	
Lumbricus terrestris	__ Earthworm		CT4
Potamothrix, species	Tubificid Worm		BW, CT4
Glossiphoniidae		Freshwater Leeches	
Erpobdella, species	__ Leech		BW
Glossiphonia, species	__ Leech		BW
Phylum ?			
-----	unsegmented worm		GT, BC
Phylum Mollusca		MOLLUSKS	19 species
Gastropoda Order			
Lymnaeidae		Pond Snails	
Pseudosuccinea columella	__ Pond Snail		BW
Physidae		Pouch Snails	
Physella, 2 sp. incl. heterostrotha	__ Air-breathing Snail		DS, FG, BC
Planorbidae		Wheel Snails	
Gyraneus parvus	__ Freshwater Snail		FG
Heliosoma ansepts	__ Air-breathing Snail		DS
H. trivolvis	Ram's Horn Air-breathing Snail		BW, DS
Promenectus exacuouus	__ Freshwater Snail		FG
Viviparidae		Mystery Snails	
Campeloma decisum	Apple Snail		DS, BC
Cipangopaludina chinensis ?	Chinese Mystery Snail		GT, BC
C. japonica	Japanese Pond Snail		
Several slug families		Slugs	
Arion ater rufus ?	Rufous Garden Slug ?		PA
Limax, species	__ Slug		CT4
Bivalve Order			
Sphaeriidae			
Musculium lacustre/securis	__ Finger-nail Clam		DS, FG-sp
Pisidium castellanum?	__ Finger-nail Clam		BW
Unionidae		Freshwater Mussels	
Alasmidonta undulata	Triangle Floater		HB, BR
Elliptio complanata	Eastern Elliptio Mussel		common
Lampsilus radiata	Eastern Lamp Mussel		HB, BR
Ligumia nasuta	Eastern Pond Mussel		HB, BR
Pyganodon cataracta	Eastern Floater		DS

Crustacea	Crustaceans	
Cladocera Order; Daphnidae	Water-fleas	
Daphnia 2 sp., 1 magna	Water-flea (1/15")	FG
Isopoda Order		
Caecidotea communis	— Isopod	DS, BW, FG-ok?
Isopoda Order: Asellidae	Pillbugs and Sowbugs	
Oniscus, species	— Sowbug	WP
Porcellio scaber	— Sowbug	BW
Amphipoda Order; Gammaridae	Amphipods	
Gammarus fasciatus	— Freshwater Amphipod	DS
Hyalella azteca ?	— Amphipod	BW, FG
Decapoda Order: Cambaridae	Crayfish	
Orconectes limosus	— Crayfish	FG
Lynceus brachyurus	Clam Shrimp	BW-ad
Diploda	Millipedes	
Julus, species	— Millipede	WP, KH, BC, GT
Chilopoda	Centipedes	
Scutigera, species	Brown Centipede	PA, WP
Arachnida	ARACHNIDS	49 species
Pseudoscorpiones	Pseudo-scorpions	
genus ?	Pseudo-scorpion (1/4")	WP, NP
Opiliones	Daddy-long-legs (Harvestmen)	
Leiobunum, species	— Daddy Long-legs	JW
Opilio, species	— Daddy Long-legs	JW
Phalangiiidae	Harvesters	
Phalangium opilio	Brown Daddy Long-legs	WP, CT4, JH
Araneae	Spiders	
Agelenidae	Grass Spiders	JW
Araneidae	Orb Weaver Spiders	
Argiope, species	"small" Argiope	JW
Argiope aurantia ?	Black-and-yellow Argiope	JW
Micrathena gracilis ?	Spiny Box Spider	WP/NP
Clubioidae	Two-clawed Hunting Spiders	JW
Dictynidae	Dictynid Spiders	JW-2 sp.
Gnaphosidae	Gnaphosid Spiders	JW
Linyphiidae	Sheet-web Spiders	
Frontinella pyramitela	Bowl and Doily Spider	JW, PM
Neriene radiata	Filmy Dome Spider	JW
2 other species	Sheet-web Spiders	JW
Lycosidae	Wolf Spiders	
Lycosa cardosa	— Wolf Spider	PM, WP
Salticidae	Jumping Spiders	
Audax, species	— Jumping Spider	WP
Habrocestum ?, species	— Jumping Spider	JW
2 other species	— Jumping Spider	JW
Tetragnathidae	Tetragnathid Spiders	
Tetragnatha extensa	Long-jawed Orb Weaver	JW
Therididae	Comb-footed (Cobweb) Spiders	
Achaearanea tepidariorum	American House Spider	PM
Enoplognatha ovata	— Cobweb Spider	JW
2 other species	Comb-footed Spiders	JW

Misumena vatia

Xysticus, species

Acari (Acarina)**Acaridae**

genus?

Anoetidae

genus?

Eylaidae

Eylais, species

Glycyphagidae

Dermacarus hylandi

D. hypudaei

Orycteroxenus soricis

Laelapidae

Androlaelaps fahrenheitzi

Eulaelaps stabularis

Haemogamasus, species

Hirstionyssus blarinae

H. isabellinus

H. utahensis

Laelaps, species

Ixodidae

Dermacenter variabilis

Ixodes dammini

Listrophoridae

Listrophorus mexicanus

Mycoptidae

Myocoptes, species

Pygmephoridae

Bakerdania, species

Pygmephorus, species

Family ?

Oligonychus ilicius

Ornithonyssus bacoti

Trombidium, species

Crab Spiders

Goldenrod Crab Spider

— Crab Spider

Mites & Ticks**Acarid Mites**

Acarid Mite

Anoetid Mites

Anoetid Mite

Aquatic Mites

Water Mite

Glycyphagid Mites

Glycyphagid Mite

Glycyphagid Mite

Glycyphagid Mite

Laelapid Mites

Laelapid Mite

Laelapid Mite

Laelapid Mite

Laelapid Mite

Laelapid Mite

Laelapid Mite

Laelapid Mite

Hard-backed Ticks

Brown Dog (Wood) Tick

Eastern Deer Tick

Listrophorid Mites

Listrophorid Mite

Mycoptid Mites

Mycoptid Mite

Pygmephorus Mites

Pygmephorus Mite

Pygmephorus Mite

Red Spider Mite

Red Velvet Mite

WP, JW

JW

GJ-Lab

GJ-Lab

FG

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab-imm

GJ, CT4, WP

GJ

GJ-Lab

GJ-Lab

GJ-Lab

GJ-Lab

CT4, JH

GJ-Lab

JW, WP

Insecta**INSECTS****504 species****Collembola**

Collembola Family

Sminthuridae Family

Springtails

Common Springtail

Globular Springtail

WP, NP

WP, NP

Ephemeroptera

Acerpenna, species

Caenis diminuta

Siphonuris, species

Stenonema, species*

Mayflies

(not sorted to family)

— Mayfly

— Mayfly

— Mayfly

— Mayfly

FG-nym

FG-nym

BW-lar

FG-nym

* on rock in Walden; Les Kaufman has on video.

Odonata**Dragonflies & Damselflies****43 species**

Specialists included: Brian Cassie, Frank Gallo, John Himmelman, Bill Loughran, Paul Miliotis, Peter Trimble, Guy Tudor, and Dick Walton.

Calopterygidae

Calopteryx aequabilis

C. maculata

Lestidae

Lestes forcipatus

L. inaequalis

L. rectangularis

L. vigilax

Coenagrionidae

Argia fumipennis

Chromagrion conditum

Enallagma aspersum

E. ebrium

E. exsulans

E. geminatum

E. signatum

E. vesperum

Ischnura posita

I. verticalis

Anisoptera**Aeshnidae**

Aeshna mutata

A. umbrosa

Anax junius

Gomphidae

Dromogomphus spinosus

Gomphus exilis

Cordulegastridae

Cordulegaster, species

Macromiidae

Macromia illinoisensis

Corduliidae

Epiheca cynosura

E. princeps

Libellulidae

Celithemis elisa

C. fasciata

Erythemis simplicicollis

Leucorrhina frigida

L. intacta

Libellula auripennis

L. cyanea

L. incesta

L. luctuosa

L. lydia

L. pulchella

L. quadrimaculata

Pachydiplax longipennis

Pantala hymenaea

Perithemis tenera

Sympetrum obtrusum

S. rubricundulum

Tramea lacerata

Broad-winged Damselflies

River Jewelwing

Ebony Jewelwing

Spread-winged Damselflies

Sweetflag Spreadwing

Elegant Spreadwing

Slender Spreadwing

Swamp Spreadwing

Narrow-winged Damselflies

Variable Dancer

Aurora Damsel

Azure (Swamp) Bluet

Marsh Bluet

Stream Bluet

Skimming Bluet

Orange Bluet

Vesper Bluet

Fragile Forktail

Eastern Forktail

Dragonflies**Darners**

Spatterdock Darner

who?-nym

Shadow Darner

Common Green Darner

Clubtails

Black-shouldered Spinyleg

Lancet Clubtail

Spiketails

— Spiketail

Belted & River Cruisers

Illinois River Cruiser

"Emeralds" (used in birds)

Common Basket-tail

Prince Basket-tail

"Skimmers" (used in birds)

Calico Pennant

Banded Pennant

Eastern Pondhawk

Frosted Whiteface

Dot-tailed Whiteface

Golden-winged Skimmer

Spangled Skimmer

Slaty Skimmer

Widow Skimmer

Common Whietail (Skimmer)

Twelve-spotted Skimmer

Four-spotted Skimmer

Blue Dasher

Spot-winged Glider

Eastern Amberwing

White-faced Meadowhawk nymph

Ruby Meadowhawk

Black Saddlebags

Plecoptera	Stoneflies	
Perlidae	Common Stoneflies	GT/BC
Perla, species	— Common Stonefly	WP/NP
2nd species	— Stonefly	PG
Orthoptera	Grasshoppers, Crickets & Katydid	8 sp.
Acrididae	Grasshoppers	
Melanopus, species	— Grasshopper	CT4
genus ?, 2nd species	— Grasshopper	GT/BC
genus ?	— Locust	WP, NP
Gryllidae	Crickets	
Acheta domestica	House Cricket	
Allenemobius fasciatus?	— Ground Cricket	CT4
Gryllus pennsylvanicus	Northern Field Cricket	WP, NP
Nemobius, species	— Ground Cricket	BW
Oecanthus fultoni	Snowy Tree Cricket	
Blattodea	Cockroaches	
Blattella germanica	German Cockroach	
Parcoblatta pennsylvanica	Pennsylvania Wood Roach	BW
Periplaneta, species	— Cockroach	NP, WP
genus ?	Mediterranean Cockroach	KH
Mantodea	Mantises (Mantids)	
genus ?	— Mantid	PG
Dermaptera	Earwigs	
Euborellia, species	— Earwig	WP, NP
Forficula auricularia	European Earwig	
Isoptera	Termites	
Reticulitermes flavipes	Subterranean Termite	BC/GT, JH, CT4
Anoplura	Sucking Lice	
Hoplopleura hesperomydis	— Sucking Louse	GJ-Lab
Thysanoptera	Thrips	
Thripidae	Common Thrips	
genus ?	Common Thrip	WP, NP
Hemiptera	Bugs (Heteroptera in 1989)	18 sp
Belostomatidae	Giant Water Bugs	
Belostoma flumineum	— Giant Water Bug	BW
Belostoma, other species	— Giant Water Bug	FG-nym
Coreidae	Leaf-footed Bugs	
genus ?	— Leaf-footed Bug	BW, GT/BC
Corixidae	Water Boatmen	JH, CT4
Hesperocorixa interrupta ?	— Water Boatman	BW
Sigara atropodonta ?	— Water Boatman	BW, +
Gerridae	Water Striders	
Gerris marginatus	— Water Strider	GT, BC, CT4
G. remigus ?	— Water Strider	BW, WP
G. species	— Water Strider	FG-nymph
Hydrometridae	Water Treaders	
Mesovelia, species	Water Treader	BW

INSECTS: Bugs (cont.)

Lygaeidae	Lygaeid (Seed) Bugs	
Lygaeus kalmii	Small Eastern Milkweed Bug	WP, NP, RH
Miridae	Plant Bugs	JS-1
Notonectidae	Backswimmers	
Buena, species	— Backswimmer	FG-nym
Notonecta irrorata	— Backswimmer	BW, FG
N. undulata	— Backswimmer	BW
Pentatomidae	Stink Bugs	
Acrostemum hilare	Green Stinkbug	NP, WP
Phymatidae	Ambush Bugs	
	— Ambush Bug	JS, GT/BC
Pleidae	Pygmy Backswimmers	
Neoplea striola	Pygmy Backswimmer	BW (Noto:?)
Veliidae	Broad-shld. Water-Striders	
Microdelia, species	— Broad-shld. Water-Strider	BW
Homoptera	Aphids, Planthoppers & Scale Insects	8 sp.
Aphididae	Aphids	
Aphis, species	— Aphid	JS
Aphid, other species	— Aphid	CT4
Cercopidae	Froghoppers/Spittlebugs	
Philaemus spumarius	Meadow Spittlebug	NP, WP
Cicadidae	Cicadas	
Tibicen canicularis	Dogday Harvestfly	WP, NP
Cicidellidae	Leafhoppers	
Graphocephala coccinea	Scarlet-and-green Leafhopper	WP
Membricidae	Treehoppers	
Sticto cephalo	Buffalo Treehopper	WP
Psyllidae	Psyllids	
genus?	— Psyllid	JS
Family?	Scale Insects	
Parthenolecanium fletcheri	Fletcher Scale Insect	CT4
Neuroptera	Nerve-wings	4 sp.
	(incl. Megaloptera, Sialodea, Planipen., Raphid.)	
	(incl. lacewings, dobsonflies, snakeflies, antlions)	
Chrysopidae	Green Lacewings	
Chrysoptera arnia	Green Lacewing	WP
Corydalidae	Dobsonflies	
Corydalus cornutus	Eastern Dobsonfly	BW, PA
Myrmeleontidae	Antlions	
Myrmeleon, species	— Antlion	JS, MM, PA
Sialidae	Alderflies	
Sialis, species	— Alderfly	FG-nym
Mecoptera	Scorpionflies	2 sp.
Bittacidae	Hangingflies	
Bittacus stigmaterus?	Eastern Woodland Hangingfly	NP/WP
Panorpidae	Common Scorpionflies	
genus?	— Scorpionfly	GT/BC

Trichoptera p 37
 Diplectrona modesta
 Frenesia difficilis
 Hydropsyche hageni
 Limnephilus, 2 species
 Molanna, species
 Ptilistomis ocellifera ?
 8 species (so add 2)

Caddisflies
 — Caddisfly
 — Caddisfly
 — Caddisfly
 Northern Casemakers
 — Caddisfly
 Giant Casemaker Caddisfly

8 sp. p 37
 FG-lar
 FG-lar
 FG-lar
 BW-lar
 FG-egg case
 BW-lar
 PG

Lepidoptera

Butterflies, Skippers & Moths

208 sp.

Butterflies, Skippers

30 sp.

Note: Sequence of butterflies & skippers follows 1995 NABA "Checklist & English Names of North American Butterflies" by Brian Cassie, Jeffrey Glassberg, Paul Opler, R. Robbins and Guy Tudor. List weak due to very hot early spring, many species came out early; heavy rains (12") and clouds in June; second hatchings hadn't taken place.

Among reporters were Brian Cassie, John Himmelman + team, Vernon Laux, Bill Loughran, Blair Nikula, Peter Trimble, Guy Tudor, and Dick Walton.

Papilionidae
 Papilio glaucus
 P. triolus
Pieridae
 Pieris rapae
 Colias eurytheme
 C. philodice
Lycaenidae
 Lycaena phlaeas
 Satyrium calanus
 S. liparops
 Everes comyntas
 Celastrina ladon neglecta
Nymphalidae
 Speyeria cybele
 Boloria selene
 Phyciodes tharos
 Euphydryas phaeton
 Polygonia interrogationis
 P. comma
 Vanessa virginiensis
 V. cardui
 V. atalanta
 Limenitis arthemis astyanax
 Satyrodes appalachia
 Megisto cymela
 Cercyonis pegala
 Danaus plexippus
Hesperiidae
 Epargyreus clarus
 Thorybes pylades
 Ancyloxypha numitor
 Thymelicus lineola
 Wallengrenia egeremet
 Pompeius verna

Swallowtails
 Eastern Tiger Swallowtail
 Spicebush Swallowtail
Whites & Sulphurs
 Cabbage White
 Orange Sulphur
 Clouded Sulphur
Gossamer-wing Butterflies
 American Copper
 Banded Hairstreak
 Striped Hairstreak
 Eastern Tailed-Blue
 Summer Spring Azure
Brush-footed Butterflies
 Great Spangled Fritillary
 Silver-bordered Fritillary
 Pearl Crescent
 Baltimore Checkerspot
 Question Mark
 Eastern Comma
 American Lady
 Painted Lady
 Red Admiral
 Red-spotted Purple
 Appalachian Brown
 Little Wood Satyr
 Common Wood-Nymph
 Monarch
Skippers
 Silver-spotted Skipper
 Northern Cloudywing
 Least Skipper
 European Skipper
 Northern Broken-Dash
 Little Glassywing

NOTE: Paul Goldstein said they had 120 large moths, 65+ micromoths = 185+. The sequence (unlike butterflies) is A-Z by scientific family name and A-Z by genus within families. Many species and genera have no English name yet. List prepared by Mark Mello, Paul Goldstein and John Himmelman. Specimens have been kept of most for better id when needed. I have 178 here.

Arctiidae

Apantesis phalerata
Cisseps fulvicollis
Ctenucha virginica
Cycnia tenera
Halysidota tessellaris
Haploa lecontei
Holomelina opella
Pyrrarctica isabella
Spilosoma congrua
S. virginica

Blastobasidae

Glyphidocera, species
genus?

Cossidae

Zeuzera pyrina

Drepanidae

Drepana arcuata
Oreta rosea

Gelechiidae

Trichotaphe flavocostella
genus?

Geometridae

Aethalura intertexta
Biston betularia cognataria
Cepphis decoloraria
Chloroclystis rectangulata
Ectropis crepuscularia
Ennomos subsignaria
Euclana serrata
Eucleana irraria
Eugonobapta nivosaria
Eulithis diversilineata
E. explanata
Eupithecia, species
Eusarca confusaria
Hypagyrtis esther
H. unipunctata
Itame postularia
Lyttosis unitaria
Melanolopha canidaria
Metarranthis hypocharia
Nematocampa resistaria
Nemoria rubrifrontaria
Patalene olyzonaria
Protoarmia porcelaria
Scopula caecuminaria
S. limboudata

Tiger Moths

Harnessed Tiger Moth
Yellow-collared Scape Moth
Virginia Ctenucha Day Moth
Delicate Cycnia Moth
Banded Tussock Moth
Leconte's Haploa Moth
Tawny Holomelina Moth
Isabella Woolly-bear Tiger Moth
Agreeable Tiger Moth
Yellow Bear Moth
Blastobasid Moths (not in 1989 book)
_____ Moth
_____ Moth
Leopard Moths & Carpenter-worms
_____ Leopard Moth
Hooktip Moths
Arched Hooktip Moth
Rose Hooktip Moth
Gelechiid Moths
_____ Moth
_____ Moth
Geometrid Moths/Measuring-worms
Four-barred Gray Moth
Pepper-and-salt Geometrid Moth
_____ Moth
_____ Moth
Small Engrailed Moth
Elm Spanworm Moth
Saw-wing Moth
Least-marked Eucleana Moth
Snowy Geometer Moth
Lesser Grapevine Looper Moth
White Eulithis Moth
_____ Moth
Confused Eusarca Moth
Esther Moth
One-spotted Variant Moth
Lesser Maple Spanworm Moth
Common Lyttosis Moth
Canadian Melanophora Moth
Common Metarranthis Moth
Horned Spanworm Moth
Red-faced Emerald Moth
Juniper Geometer Moth
Porcelain Gray Moth
Frosted Tan Wave Moth
Large Lace-border Moth

Semiothisa fissinotata
S. granitata
S. ocellinaria
S. transitoria
Synchlora aerata liquoraria
Xanthorhoe lacustrata
Gracillariidae
Cameraria ?, species
Lasiocampidae
Malacosoma americanum
M. disstria
Limacodidae
Euclea delphinii
Lithacodes fasciola
Prolimacodes badia
Lymantridae
Lymantria dispar
Noctuidae
Acronicta haesitata
A. noctivaga
Allagrapha aerea
Amolita fessa
Apamea amputatrix
Apamea ? *ophiogramma*
Autographa precationis
Baileya australis
Balsa tristrigella
Bleptina carandrinalis
Caenurgina erechtea
Capis curvata
Chytolita petrealis
Chytonix palliatricula
Colocasia propinquilinea
Conservula anadonta
Cosmia calami
Epidelta metonalis
Eudryas unio
Euxoa tessellata
Gabara subnivosella
Heptagrotis phyllophora
Hyperstotia villificans
Idia aemula
I. americalis
I. diminuendis
I. lubricalis
I. rotundalis
Lacinipolia lorea
L. renigera
Lascoria ambigualis
Leucania insueta
L. laticula
L. pseudargyria

Hemlock Angle Moth
 Granite Moth
 Faint-spotted Angle Moth
 Blurry Chocolate Angle Moth
 Wavy-lined Emerald Moth
 Toothed Brown Carpet Moth
Leaf-blotch Miner Moths
 Oak Leafminer Moth
Tent Caterpillar Moths
 Eastern Tent Caterpillar Moth
 Forest Tent Caterpillar Moth
Slug Caterpillar Moths
 Spiny Oak-slug Moth
 _____ Moth
 Skiff Moth
Tussock (& Gypsy) Moths
 Gypsy Moth
Underwings & Owlet Moths
 Hesitant Dagger Moth
 Wandering Dagger Moth
 Unspotted Looper Moth
 Feeble Grass Moth
 Yellow-headed Cutworm Moth
 _____ Moth
 Common Looper Moth
 Small *Baileya* Moth
 Three-lined *Balsa* Moth
 Bent-winged Owlet Moth
 Forage Looper Moth
 _____ Moth
 _____ Moth
 Cloaked Marvel Moth
 Close-banded Yellowhorn Moth
 _____ Moth
 American Dun-bar Moth
 Pale *Epidelta* Moth
 Pearly Wood-nymph Moth
 Tesselate Dart Moth
 _____ Moth
 _____ Moth
 White-lined Graylet Moth
 Common *Idia* Moth
 American *Idia* Moth
 Orange-spotted *Idia* Moth
 Glossy Black *Idia* Moth
 Round *Idia* Moth
 Bridled Arches Moth
 Bristly Cutworm Moth
 Ambiguous Moth
 _____ Moth
 _____ Moth
 _____ Moth

Leuconycta diptheroides	Green Leuconycta Moth
Lithacodia albidula	_____ Lithacodia Moth
L. bellicula	Bog Lithacodia Moth
L. carneola	Pink-barred Lithacodia Moth
L. muscosula	Large Mossy Lithacodia Moth
L. synochitis	Black-dotted Lithacodia Moth
Macrochilo hypocriticalis	_____ Moth
M. litophora	_____ Moth
Melanchra assimilis	Black Arches Moth
Metalectra discalis	Common Fungus Moth
Noctua pronuba	Large Yellow Underwing
Oligia exhausta	_____ Moth
Orthodes cynica	Cynical Quaker Moth
Paectes oculatrix	Eyed Paectes Moth
Palthis angularis	Dark-spotted Palthis Moth
Panopoda rufimargo	Red-lined Panopoda Moth
Panthea pallescens	_____ Moth
Phalaenostola larentioides	Black-banded Owlet Moth
Polia detracta	Disparaged Arches Moth
Protorthodes oviduca	Ruddy Quaker Moth
Pseudorthodes vecors	Small Brown Quaker Moth
Renia salusalis	_____ Moth
Rhynchagrotis	_____ Moth
Rivula propinqualis	Spotted Grass Moth
Tarachidia candefacta	Olive-shaded Bird-dropping Moth*
	(Favorite of John Himmelman; in Boston Globe/Concord Journal)
Xylomoia chagnoni	_____ Moth
Zanclognatha cruralis	Early Moth
Z. jacchusalis	_____ Moth
Z. lituralis	Lettered Moth
Z. martha	Barrens Moth
Z. protumnusalis	_____ Moth
Notodontidae	Notodontid (Prominent) Moths
Datana drexilii	Drexel's Datana
Gluphisia septentrionis	Common Gluphisia Moth
Hyperaeschra georgica	Georgian Prominent Moth
Lochmaeus bilineata	Double-lined Prominent Moth
Macrurocampa marthesia	Mottled Prominent Moth
Nadata gibbosa	White-dotted Prominent Moths
Oecophoridae	Oecophorid Moths
Agonopteryx robinella	_____ Moth
Psilocorsis querciella	_____ Moth
genus ?	_____ Moth
genus ?	_____ Moth
Plutellidae	Diamondback Moths
Plutella xylostella	_____ Diamondback Moth
Psychidae	Bagworm Moths
Thyridopteryx ephemeraeformis	Evergreen Bagworm Moth
Pterophoridae	Plume Moths
genus ?	_____ Plume Moth

Pyralidae	Pyralid (Grass & Wax) Moths	
Aglossa cuprina	_____	Moth
Anageshna primordialis	_____	Moth
Apogeshna sternalis	_____	Moth
Chrysoteuchia topiara	_____	Moth
Condylolomia participalis	_____	Moth
Donacaula "melinella" complex	_____	Moth
D. "longirostrella" complex	_____	Moth
Eufernaldia, sp. near agitatellus	_____	Moth
E. bidens	_____	Moth
E. laqueatellus	_____	Moth
E. leuteolus	_____	Moth
Euruma densella	_____	Moth
Eustixia pupula	_____	Moth
Glyptocera consobrinella	_____	Moth
Herculia binodulalis	_____	Moth
H. olinalis	_____	Moth
Herpetogramma aegealis	_____	Moth
Pantographa limata		Basswood Leafroller Moth
Parapediasia decorella	_____	Moth
Peoria approximella	_____	Moth
Plodia interruptans		Asiatic Meal Moth
Pyrausta, species	_____	Moth
Tetralopha robustella	_____	Moth
Udea rubigalis	_____	Moth
Urola nivalis	_____	Moth
Phycitinae Subfamily	_____	Moth
Sesiidae	Clearwing Moths	
Synanthedon acerni		Maple Callus Borer Moth
Sphingidae	Sphinx (& Hawk) Moths	
Lapara bombycoides		Northern Pine Sphinx Moth
Paonias astylus		Huckleberry Sphinx Moth
P. excaecatus		Blinded Sphinx Moth
P. myops		Small-eyed Sphinx Moth
Tortricidae	Leafroller (Tortricid) Moths	
Choristoneura pinus	_____	Moth
Croesia curvalana	_____	Moth
Cydia pomonella	___	Coddling Moth
Epinotia transmissana	_____	Moth
Eucosoma, species	_____	Moth
Melissopus latiferreanus	_____	Moth
Olethreutes appendicea	_____	Moth (4 sp)
O. fasciatana	_____	Moth
O. permundana	_____	Moth
Petrova comstockiana	_____	Moth
Sparganothis pettitana	_____	Moth
S. unifasciana	_____	Moth
Yponomeutidae	Ermine Moths	
Yponomeuta, species	_____	Ermine Moth
Zygaenidae	Leaf Skeletonizer Moths	
Harrisina americana		Grapeleaf Skeletonizer Moth

BW

Bruchidae	Seed Beetles	JS-1
Cantharidae	Soldier Beetles	PG-1+
Chauliognathus, sp.	— Soldier Beetle	WP, NP
Carabidae (incl. Cicindelidae)	Ground & Tiger Beetles	PG-9 sp.
Cicindela sexguttatus	— Tiger Beetle	JS, NP, WP
C. punctulata	— Tiger Beetle	JS
Calosoma scrutator	Fiery Searcher	WP, NP
Pterostochine, species	— Woodland Ground Beetle	JS
Cerambycidae	Long-horned Beetles	PG-1
Anoplodera cordifera	— Flower Longhorn	JS
A. vittata	— Flower Longhorn	JS
Desmoceris palliatus	Elderberry Borer Beetle	BW
Evodinus, sp.	Long-horned Flower Beetle	NP, WP
Leptura lineola	— Flower Longhorn	JS
Prionus laticollis	Broad-necked Root Borer	on list
Tetraopes tetrophthalmus	Red Milkweed Beetle	JS, NP/WP
Typocerus lugubris	— Flower Longhorn	JS
T. velutinus	— Flower Longhorn	JS
Chrysomelidae	Leaf Beetles	
Alticinae Subfamily; genus ?	Flea Beetle	NP, WP
Chrysochus auratus	Goldsmith (Dogbane) Beetle	NP, WP
Crioceris asparagi	Asparagus Beetle	JS
Colaspis brunnea	Grape Colaspis Beetle	JS
Graphops, species	— Beetle	JS
Pachybrachys, species	— Cylindrical Leaf Beetle	JS
Cleridae	Checkered Beetles	
Trichodes nuttalli	Nuttall's Shaggy Beetle	JS
Coccinellidae	Lady Beetles (Bugs)	
Adalia bipunctata	Two-spotted Lady Beetle	
Anatis quindecimpunctatus	— Lady Beetle	
Harmonia convergens	— Lady Beetle	
Hippodamia convergens	— Lady Beetle	
H. triderimpunctata	— Lady Beetle	JS
Cryptophagidae	Silken Fungus Beetles	
Toramus, sp	Silken Fungus Beetle	NP, WP
Curculionidae	Weevils & Snout Beetles	3- sp
Curculio rectus	Acorn Weevil	NP, WP
Rhynchaenus, species	— Flea Weevil	JS
Dytiscidae	Predaceous Diving Beetles	
Acilus, species	— Diving Beetle	FG-lar
Agabus, species	— Diving Beetle	FG-lar
Dytiscus harrisii	— Diving Beetle	BW
Hydroporus, 2 species	— Diving Beetle	BW
Dytiscidae	Predaceous Diving Beetles (cont)	
Laccophilus, species	— Diving Beetle	BW
Uvarus, species	— Diving Beetle	FG
Elateridae	Click Beetles & Wireworms	
Melanotus communis ?	— Click Beetle	GT/BC
genus ?	— Click Beetle	PG: 3 sp
Erotylidae	Pleasing Fungus Beetles	
Triplax festiva ?	Soft Bracket Fungi Beetle	NP, WP

	Gyrinidae	Whirligig Beetles	
Dineutus nigrior	—	Whirligig Beetle	FG
Gyrinus, 2 species	—	Whirligig Beetle	BW, FG1
	Haliplidae	Crawling Water Beetle	
Haliplus immaculicollis	—	Crawling Water Beetle	FG
H. semifasciatus ?	—	Crawling Water Beetle	BW
H. triopsis	—	Crawling Water Beetle	FG
	Hydraenidae	Minute Moss Beetles	
Hydraena, sp.	—	Minute Moss Beetle	NP, WP
	Hydrophilidae (incl. Helophoridae)	Water Scavenger Beetles	
Enochrus, species	—	Water Scavenger Beetle	FG
Helophorus, species	—	Water Scavenger Beetle	FG
Hydrochaera, species	—	Water Scavenger Beetle	FG-lar
	Lampyridae*	Lightningbugs/Fireflies/Flash Beetles	
(Sara Lewis of Tufts Univ. worked w/ 3 students: Christopher Cratsley, Jennifer Rooney, and Ben Michel on these.)			
Ellychania corrusca	—	Diurnal Firefly	SL, NP/WP
Lucidota atra	—	Diurnal Firefly	SL, BW, NP
Photinus aquilonius	—	Nocturnal Firefly	SL team
P. greeni	—	Nocturnal Firefly	SL team
P. ignitus	—	Nocturnal Firefly	SL team
P. marginellus	—	Nocturnal Firefly	SL team
Photuris pennsylvanicus	?	Pennsylvania Firefly	JS ?
P. versicolor	—	Nocturnal Firefly	SL team
P., species	—	Nocturnal Firefly	SL team
Pyractomena angulata	—	Nocturnal Firefly	SL team
	Leiodidae	Round Fungus Beetles	
Leiodes, sp.		Round Fungus Beetle	NP, WP
	Lucanidae	Stag Beetles	
Pseudolucanus capreolus		Stag Beetle*	JS, NP, WP
(* in Concord & Lincoln Journal photographs)			
	Lycidae	Net-wing Beetles	JS
	Mordellidae	Blister Beetles	JS-2 sp
Mordellistena, species	—	Blister Beetle	JS
	Phengodidae	Glow-worm Beetles	
Phengodes plumosa ?		Phengodes Beetle	NP, WP
	Ptinidae	Spider Beetles	
Gibbium psylloides ?	—	Spider Beetle	WP, NP
	Scarabaeidae	Scarab Beetles	PG-12 sp.
Anomela orientalis ?		Oriental ? Beetle	JS
Macroductylus subspinosus		Rose Chafer Beetle	JS
Pelidnota punctata		Spotted Grapevine Beetle	JS, NP, WP
Phyllophaga rugosa		May Beetle	BW
Popillia japonica		Japanese Beetle	JS, CT 4
	Staphylidae	Rove Beetles	PG-1 sp.
Anotylus, sp.	—	Rove Beetle	WP, NP
Bledius, species	—	Rove Beetle	JH/CT4
	Tenebrionidae	Darkling Beetles	PG-1 sp.

p 44	Diptera	Flies (true)	37 sp.	p 44
	Agromyzidae		Leafminer Flies	PG-1
genus ?		Locust Leafminer		
	Anthomyidae		Anthomyiid Flies	PG-2
Scatophaga stercoraria		Yellow Dung Fly		WP, NP
	Asillidae		Robber Flies	
Efferia, species		__ Robber Fly		CT4
Laphria, species		__ Bee Hunter		WP/NP
Tolmerus, species		__ Robber Fly		JS, WP, NP
	Bombyliidae		Bee Flies	PG-2
Anthrax, species		__ Bee Fly		SO/BS
Bombylris, species		__ Bee Fly		NP, WP
	Calliphoridae		Blow Flies	
Calliphora, species		__ Blow Fly		JS, PG, SO
	Ceratopogonidae		Biting Midges	PG-1
	Chaoboridae		Phantom Midges	
Chaoborus punctipennis		__ Phantom Midge		FG-lar
	Chironomidae		Midges	
Chironomus, species		__ Midge (hemoglobin type)		BW-lar
	Conopidae		Thick-headed Flies	
Physocephala tibialis		Thick-headed Fly		SO/BS
	Culicidae		Mosquitoes	PG-4 sp.
Aedes cinereus		__ Mosquito		FG-larv, CT4
Anopheles, species		__ Mosquito		CT-4
Culex apicalis		__ Mosquito		FG-larv, CT4
	Dolichopididae		Long-legged Flies	
Condylostylus chrysopasi		__ Long-legged Fly		JS, NP, WP
	Empididae		Dance Flies	PG-1
	Muscidae		House Flies	
Musca domestica		House Fly		
	Otitidae		Picture-winged Flies	JS-1
	Pipunculidae		Big-headed Flies	PG-1
	Ptychopteridae (Not in 1989 Com. Names Insects)			PG-1
	Rhagionidae		Snipe Flies	PG-1
	Sciaridae		Dark-winged Fungus Gnats	JS-1
	Simulidae		Black Flies	
Simulium, species		__ Black Fly		WP, N
	Sarcophagidae		Flesh Flies	
Senotainia trilineata		__ Flesh Fly		SO/BS; JS
	Syrphidae		Hover (Flower)Flies	JS-3
Metasyrphus americanus		American Hover Fly		GT/BC, CT
	Tabanidae		Deer & Horse Flies	
Chrysops vittatus		__ Deer Fly		GJ, NP/WP
Tabanus, species		__ Deer Fly		CT4
	Tachinidae		Tachinid Flies	NP,SO/BS
	Tephritidae		Fruit Flies	
Drosophila, species		__ Fruit Fly		WP, NP
	Tipulidae		Crane Flies	BW-3 sp.
Bittacomorpha clavipes		Phantom Crane Fly		NP, WP
Tipula, species		__ Crane Fly		WP, NP, GT

p 45	Siphonaptera	Fleas	3 species	p 45
Ctenophthalmus pseudagyrtes		— Flea		GJ-Lab
Doratopsyla blarinae		— Flea		GJ-Lab
Orchopeas leucopus		— Flea		GJ-Lab
	Hymenoptera	Ants, Bees and Wasps		110 sp.
	(many wasps and bees are from Steve Orzack & Bill Stubblefield)			
	Andrenidae	Andrenid Bees		
Andrena, species	— Bee			SO/BS
A. spiraeana	— Bee			SO/BS
A. wilkella	— Bee			SO/BS
	Anthophoridae	Cuckoo, Digger & Carpenter Bees		
	incl. Xylocopidae* (not a family in 1989 Com. Names of Insects...)			
Ceratina, species	— Carpenter Bee			SO/BS; JS
Xylocopa virginica	— Carpenter Bee			SO/BS
	Apidae	Typical Bees		
Apis mellifera	Honey Bee			
Bombus affinis	— Bumble Bee			SO/BS
B. fervidus	— Bumble Bee			SO/BS
B. impatiens	— Bumble Bee			SO/BS
Mellissodes (Apomelissodes) apicata	— Bee			SO/BS
	Braconidae	Braconid Wasps		SO/BS-1
	Chalcididae	Chalcidid Wasps		on sheets
	Chrysididae	Cuckoo Wasps		
Hedychrum confusum	— Cuckoo Wasp			SO/BS; JS-sp
	Cynipidae	Gall Wasps		
Neuroterus clavensis	Oak Apple Gall Wasp			WP, NP
	galls on cherry, oak, maple, hickory, elm and blueberry- 6 sp? GT/BC			
	Evaniidae	Ensign Wasps		
Evania, species	— Ensign Wasp			SO/BS-1
	Formicidae	Ants (incl. Sidewalk, Lemon & Yellow Ants)		
	(from Edward O. Wilson, Stefan Cover et al; without English names)			
Acanthomyops claviger	— Ant			EOW/SC
Amblyopone pallipes	— Ant			EOW/SC
Aphaenogaster fulva	— Spine-waisted Ant			EOW/SC
A. rudis	— Spine-waisted Ant			EOW/SC
Camponotus americanus	— Carpenter Ant			EOW/SC
C. chromaides	— Carpenter Ant			EOW/SC
C. nearcticus	— Carpenter Ant			EOW/SC
C. novboracensis	— Carpenter Ant			EOW/SC
C. pennsylvanicus	— Carpenter Ant			WP, NP, PG
Crematogaster cerasi	— Acrobatic Ant			EOW/SC
C. lineolata	— Acrobatic Ant			EOW/SC
Dolichoderus plagiatus	— Ant			EOW/SC
Formica argentea	— Ant (Red/Crater/Mound)			EOW/SC
F. fusca	— Ant			EOW/SC
F. incerta	— Ant			EOW/SC
F. nepticula	— Ant			EOW/SC
F. nitidiventris	— Ant			EOW/SC
F. querquetulana	— Ant			EOW/SC
F. rubicunda	— Ant			EOW/SC
F. schaufussi	— Ant			EOW/SC
F. subsericea	— Ant			EOW/SC

F. (microgyne grp.) sp.	— Ant	EOW/SC
<i>Lasius alienus</i>	— Ant	EOW/SC
<i>L. nearcticus</i>	— Ant	EOW/SC
<i>L. neoniger</i>	— Ant	EOW/SC
<i>Leptothorax curvispinosus</i>	— Ant	EOW/SC
<i>L. longispinosus</i>	— Ant	EOW/SC
<i>Monomorium emarginatum</i>	Little Black ? Ant	EOW/SC
<i>Myrmecina americana</i>	— Ant	EOW/SC
<i>Myrmica pinetorum</i>	— Ant	EOW/SC
<i>M. punctiventris</i>	— Ant	EOW/SC
<i>Myrmica undescribed species .1</i>	— Ant	EOW/SC
<i>Myrmica undescribed species .2</i>	— Ant	EOW/SC
<i>Pheidole pennsylvanica</i>	— Ant	EOW/SC
<i>Prenolepis imparis</i>	Honey Ant	EOW/SC
<i>Solenopsis molesta</i>	— Fire Ant	EOW/SC
<i>Tapinoma sessile</i>	— Ant	EOW/SC
<i>Tetramorium caespitum</i>	— Ant	EOW/SC
Halictidae	Sweat (Halictid) Bees	
<i>Agapostemon virescens</i>	— Bee	SO/BS; JS
<i>Augochlora</i> , species	Green Metallic Bee	WP, NP
<i>Halictus ligatus</i>	— Bee	SO/BS
<i>H. (Seladonia) confusus</i>	— Bee	SO/BS
<i>Lasioglossum (Dialictus) cressonii</i>	— Bee	SO/BS
<i>L. (D.) nymphaearum</i>	— Bee	SO/BS
<i>L. (D.) pilosus</i>	— Bee	SO/BS
<i>L. (D.) tegularis</i>	— Bee	SO/BS
<i>L. (Evylaeus) pectinatus</i>	— Bee	SO/BS
<i>L. (E.) pectoralis</i>	— Bee	SO/BS
<i>L. (L.) coriaceum</i>	— Bee	SO/BS
Ichneumonidae	Ichneumon Wasps	PG-5 sp.
<i>Metopius</i> , species	— Wasp	SO/BS
Megachilidae	Leaf-cutting Bees	
<i>Heriades (Physostetha) carinata</i>	— Bee	SO/BS
<i>Megachile (Eutrichareae) ritundata</i>	— Leaf-cutting Bee	SO/BS
<i>M. montivaga</i>	— Leaf-cutting Bee	SO/BS
<i>Osmia</i> , species	— Mason Bee	on list
Mutillidae	Velvet Ants	
<i>Dasymutilla nigripes</i>	— Velvet Ant (?)	SO/BS
Pompilidae	Spider Wasps	
<i>Anoplius</i> , species	— Spider Wasp	SO/BS
other genus	— Spider Wasp	SO/BS
Scoliidae	Scoliid Wasps	
<i>Scolia dubia</i>	Digger Wasp	WP, NP
Sphecidae	Sphecid Wasps	
(incl. Crabronidae, Nyssonidae, Pemphredonidae and Philanthidae)		
<i>Ammophila</i> , species	— Thread-waisted Wasp	JS/SC/BS
<i>A. procera</i>	— Thread-waisted Wasp	SC/BS
<i>Anacrabro ocellatus</i>	— Crabronid Wasp	SO/BS
<i>Bembix americana spinolae</i>	Eastern Sand Wasp	SO/BS
<i>Bicyrtes quadrifasciata</i>	— Nyssonid Wasp	SO/BS
<i>B. bicinctus</i>	— Nyssonid Wasp	On sheets

p 47 **Insects: Ants, Bees and Wasps (cont.)**

p 47

Cerceris fumipennis	— Philanthid Wasp	SO/BS
C. halone	— Philanthid Wasp	SO/BS
C. nigrescens	— Philanthid Wasp	SO/BS
C. prominens	— Philanthid Wasp	SO/BS
Chlorion aerarium	— Cricket Hunter Wasp	SO/BS
Ectimnius, species	— Crabronid Wasp	SO/BS
Isodontia mexicana	— Wasp	SO/BS
Oxybelus, species	— Crabronid Wasp	SO/BS
Pemphredon species	— Pemphredonid Wasp	SO/BS
Philanthus gibbosus	— Philanthid Wasp	SO/BS
P. sanbornii	— Philanthid Wasp	SO/BS
Sphex ichneumoneus	— Wasp	SO/BS; JS sp
Tenthredinoidea	Tenthredinid Sawflies	SO/BS/NP-1
Tiphiidae	Tiphiid Wasps	
Tiphia, species	— Wasp	SO/BS-2 sp
Vespidae	Vespid Wasps	
Monobia quadridens	— Wasp	SO/BS
Parancistrocerus pedestris	— Wasp	SO/BS
Polistes dominulus	— Paper Wasp	SO/BS
P. fuscatus	— Paper Wasp	NP, SO, JH
Vespa crabro	Giant Hornet	WP, NP
Vespula germanica	German Wasp (PA)	PA, KH
Vespula maculata	Bald-faced Hornet	
Vespula maculifrons	Eastern Yellowjacket	SO/BS, WP

Phylum Bryozoa

Pectinella magnifica

BRYOZOANS

a Freshwater Bryozoan (12" in diameter) KH, PP, VL