

STATE OF MAINE
Inter-Departmental Memorandum

TO: George Matula

FROM: Alan Hutchinson *Alan*

DATE: January 19, 1989

SUBJECT: Rare and Endangered Invertebrate Species of Maine

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I recently asked John Albright to compile a list of invertebrate species in Maine of a high level of rarity. I felt it would give us a sense to the scope of the issue since invertebrates are increasingly gaining attention.

The list is attached. The list is of S1 and G ranked species using Heritage jargon. It is roughly comparable to a list of vertebrates listed as Endangered, Threatened, or Special Concern. The small number of species and small number of locations makes the issue much more manageable than we may have originally thought.

AH:egc

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Nothing in Proctor Volume XII → Nomenclature could have changed.

MAINE NATURAL HERITAGE PROGRAM

INVERTEBRATE ELEMENT LIST:

SPECIES RANKED S1

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS	STATE RANK	GLOBAL RANK	# SITES
<i>Helma's Net-spinning Caddisfly</i>	<i>Cheumatopsyche helma</i>		2		
<u>ORDER MAYFLIES (EPHEMEROPTERA)</u>					
A MAYFLY (NO COMMON NAME)	SIPHONISCA AERODROMIA	-	S1	G1	1-4
<u>ORDER BEETLES (COLEOPTERA)</u>					
DUBIRAPHIAN RIFFLE BEETLE	DUBIRAPHIA SP.	C2	S1	G1?	1
<u>ORDER DRAGONFLIES (ODONATA)</u>					
LATERAL BLUET	ENALLAGMA LATERALE	-	S1	G2	1
IRREGULAR SNAKETAIL	OPHIOGOMPHUS ANANOLUS	-2	S1	G2	4
* WARPAINT EMERALD White (1969) (1989 pg 98)	SOMATACHLORA INCURVATA Only records for New England	-	S1	G2G3	1
* CANADIAN BANDED BOG SKIMMER pg 97 White (1989)	WILLIAMSONIA FLETCHERI	-	S1	G3G4	1
<u>ORDER MOTHS AND BUTTERFLIES (LEPIDOPTERA)</u>					
BARRENS BUCKMOTH	HEMILEUCA MAIA	-	S1	G4	2
TWILIGHT MOTH	LYCIA RACHELAE	-	S1	G4G5	2
CHALKY WAVE	SCOPULA PURATA	-	S1	G?	1
UNDESCRIBED ZALE	ZALE SP. 1	-	S1	G3	1
OBLIQUE ZALE	ZALE OBLIQUA	-	S1	G5	1
A NOCTUID MOTH	ZANCLOGNATHA MARTHA	-	S1	G4	2
DORCAS COPPER BUTTERFLY	LYCAENA DORCAS CLAYTONI	C2	S1	G4T1	4
HESSSEL'S HAIRSTREAK BUTTERFLY	MITOURA HESSELI	-	S1	G3G4	1
* Bog Elfin Butterfly	Incisalia lanoraicensis	2			
EFFECTIVE JANUARY 10, 1989					
Ceromatic Noctuid Moth	Pyreferra ceromatica	2			
Regal Fritillary butterfly	Speyeria idalia	2			
Chestnut Clearwing Moth	Synanthedon costanese	2			

COMMON AND
SCIENTIFIC NAMES

CATEGORY

STATE(S)

CRITERIA
RECOMMENDATION

COMMENTS

MAYFLIES (Insects, Order Ephemeroptera)

West Virginia burrowing mayfly
Ephemera triplex

2* WV*.

NFLIES & DAMSELFLIES (Insects,
Order Odonata)

Barrens bluet damselfly
Enallagma recurvatum

3C MA,NY,NJ.

Banded bog skimmer dragonfly
Williamsonia lintneri

2 NY,NJ,MA,RI,NH.

Cherokee clubtail dragonfly
Gomphus (Gomphurus) consanguis

2 SC,AL,NC,TN,VA.

Hudson clubtail dragonfly
Gomphus (Hylogomphus) adelphus (synonym of
_G. brevis)

3B MA,NY (as name originally used).

Elusive clubtail dragonfly
Gomphus (Stylurus) notatus

2 MD,WI, Canada, IA*,IL*,IN*,KY*,MI*,MN*,
NY*,OH*,TN*,WV*,AL?*,GA?*

Extra-striped snaketail dragonfly
Ophiogomphus anomalus

2 WI, Canada, ME*,NY?*,PA*.

Midget snaketail dragonfly
Ophiogomphus howei

2 KY,NC,NY,PA,VA,TN,MA*.

Alleghany snaketail dragonfly
Ophiogomphus incurvatus alleghaniensis

2 WV,VA,AL,TN?.

STONEFLIES (Insects, Order Plecoptera)

COMMON AND
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Hanson's appalachian stonefly
Hansonoperla appalachia

3C KY, MA, NH, SC, TN.

TRUE BUGS (Insects, Order Hemiptera)

Dismal Swamp chlorochroan bug
Chlorochroa dismalia

2 VA.

CICADA; AND ALLIES (Insects, Order
Homoptera)

Barrens sedge leafhopper
Limotettix sp.

2 MD.

BEETLES (Insects, Order Coleoptera)

Arbuckle Cave ground beetle
Horologion speokoites

2 WV.

Avernus cave beetle
Pseudanophthalmus avernus

2 VA.

Little Kennedy Cave beetle
Pseudanophthalmus cordicollis

2 VA.

New River Valley cave beetle
Pseudanophthalmus egberti

2 VA.

Timber Ridge cave beetle
Pseudanophthalmus hadenoecus

2 WV.

Lee County cave beetle
Pseudanophthalmus hirsutus

2 TN, VA.

COMMON A D
SCIENTIFIC NAMES

CATEGORY STATE(S)

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Holsinger's cave beetle
Pseudanopht almus holsingeri

2 VA.

Garden cave beetle
Pseudanophthalmus hortulanus

2 VA.

Hubbard's cave beetle
Pseudanophthalmus hubbardi

2 VA.

Hubricht's cave beetle
Pseudanophthalmus hubrichti

2 VA.

Crossroads cave beetle
Pseudanophthalmus intersectus

2 VA.

Rich Mountain cave beetle
Pseudanophthalmus krekeri

2 WV.

Lallemant's cave beetle
Pseudanophthalmus lallemanti

2 WV.

Mud-dwelling cave beetle
Pseudanophthalmus limicola

2 VA.

Long-headed cave beetle
Pseudanophthalmus longiceps

2 TN, VA.

Dry Fork Valley cave beetle
Pseudanophthalmus montanus

2 WV.

Nelson's cave beetle
Pseudanophthalmus nelsoni

2 VA.

Thin-neck cave beetle
Pseudanophthalmus parvicollis

2 VA.

Petrunkevitch's cave beetle
Pseudanophthalmus petrunkevitchi

2 VA.

Natural Bridge cave beetle
Pseudanophthalmus pontis

2 VA.

South Branch Valley cave beetle
Pseudanophthalmus potomaca potomaca

2 WV, VA.

COMMON AND
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Seneca cave beetle
Pseudanophthalmus potomaca senecae

2 WV.

Overlooked cave beetle
Pseudanophthalmus praetermissus

2 VA.

Spotted cave beetle
Pseudanophthalmus punctatus

2 VA.

Straley's Cave beetle
Pseudanophthalmus quadratus

2 VA.

Saint Paul cave beetle
Pseudanophthalmus sanctipauli

2 VA.

Silken cave beetle
Pseudanophthalmus sericus

2 VA.

Greenbrier Valley cave beetle
Pseudanophthalmus subaequalis

2 WV.

Thomas' cave beetle
Pseudanophthalmus thomasi

2 VA.

Maiden Spring cave beetle
Pseudanophthalmus (=Aphanotrechus) virginicus

2 VA.

Schaum's Blue Ridge ground beetle
Sphaeroderus schaudi ssp.

2 VA.

Sixbanded longhorn beetle
Dryobius sexrotatus

2 LA, MD, MS, OH, PA, AL*, AR*, IN*, KS*, KY*,
MI*, MO*, TN*, VA*, WV*.

Northeastern beach tiger beetle
Cicindela dorsalis dorsalis

1 MA, MD, NY, NJ, RI, PA*.

Cobblestone tiger beetle
Cicindela marginipennis

2 NH, VT, NY, NJ, OH, PA, MS, WV*.

Puritan tiger beetle
Cicindela puritana

1 MD, VT, MA*, NH*, CT?*

Elusive hydroporus diving beetle
Hydroporus elusivus

2* NH*.

COMMON AND
SCIENTIFIC NAMES

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Sylvan hygrotus diving beetle
Hygrotus sylvanus

2 MN,NY*.

Schwarz' diving beetle
Laccophilus schwarzi

2* MD*,VA*.

Dubiraphian riffle beetle (undescribed)
Dubiraphia sp.

2 ME.

Maureen's hydraenan minute moss beetle
Hydraena maureenae

2 VA.

Seth Forest water scavenger beetle
Hydrochus sp.

2 MD.

Black lordithon rove beetle
Lordithon niger

2 MO, Canada, AR*, CT*, DC*, GA*, IL*, KS*,
KY*, MI*, NY*, NC*, OH*, PA*, TX*, VA*, WV*.

BUTTERFLIES & MOTHS (Insects, Order
Lepidoptera)

Chestnut ermine moth
Argyresthia castaneola

3A NH*,VT*.

Chestnut casebearer moth
Coleophora leucochrysell

3A PA*.

Rare skipper
Problema bulenta

2 MD, VA, NC, SC, GA.

Bog elfin butterfly
Incisalia (=Callophrys =Mitoura) lanoraieensis

2 ME, NY, Canada, NH*.

Karner blue butterfly
Lycaeides melissa samuelis

2 IN, MI, NH, NY, OH, WI, IL*, MA*, PA*.

Clayton's copper butterfly
Lycaena dorcas claytoni

2 ME.

Hessel's hairstreak butterfly
Mitoura (=Callophrys) hesseli

3C GA, FL, MA, NC, NH, NJ, VA, MD*.

COMMON AND
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American chestnut nepticulid moth
Ectodemia castaneae

3A MD*.

Phleophagan chestnut nepticulid moth
Ectodemia phleophaga

3A MD*.

Albarufan dagger moth
Acronicta albarufa

2 MA,MO,NJ, Canada, CT*,GA*,NC*,NY*,
PA*,OH*,CO*,NM*.

Bucholz' dart moth
Agrotis bucholzi

2 NJ.

Smyth's apamea moth
Apamea smythi

2* VA*,IL*.

Marbled underwing moth
Catocala marmorata

3C KY,NC,SC,IL*,IN*,MO*,NJ*,NY*,OH*,PA*,
VA*,VT*,WV*.

Precious underwing moth
Catocala pretiosa

2 NJ,NH*,CT*,MA*,MO?*,NY*,PA*,OH*,
MD*,VA*,TN*.

Hebard's noctuid moth
Erythroecia hebardii

2 OH,NJ,VA*.

Lemmer's noctuid moth
Lithophane lemmeri

2 NJ,NY,CT*,NC?,SC?.

Noctuid moth, no common name
Papaipema aveme

2* MI*,NY*, Canada*.

Decodon borer moth
Papaipema sulphurata

2 MA.

Ceromatic noctuid moth
Pyreferra ceromatica

2 AL,FL,SC,IN,AL*,CT*,MA*,ME*,NY*,
Canada*.

Mitchell satyr butterfly
Neonympha (=Euptychia) mitchelli

2 IN,MI,NC,NJ,OH*,MD*?.

Tawny crescent butterfly
Phyciodes batesi

2 NC,VA,NY,MI,WI,ND,SD,MN, Canada,
GA*,WV*,PA*,NJ*.

Regal fritillary butterfly
Speyeria idalia

2 MA,MD,VA,WV,PA,OH,IN,MI,IL,MO,MN,WI,
IA,OK,KS,NE,SD,ND,CO,CT*,DE*,ME*,
MT*,NC*,NH*,NJ*,NY*,RI*, Canada.

COMMON AND
SCIENTIFIC NAMES

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Daecke's pyralid moth
Crambus daeckeellus

2* NJ*.

Chestnut clearwing moth
Synanthedon castaneae

2 VA*, PA*, SC*, ME*, MS*, NY*.

Chestnut leaf miner moth
Tischeria perplexa

3A VA*.

CADDISFLIES (Insects, Order Trichoptera)

Helma's net-spinning caddisfly
Cheumatopsyche helma

2 ME, KY*, TN*.

Vannote's net-spinning caddisfly
Cheumatopsyche vannotei

2 PA.

(Caddisfly, no common name)
Psilotreta hansonii

3B MA.

SNAILS (Mollusks, Class Gastropoda)

Tapered cavesnail
Fontigens holsingeri (Hubricht, 1976)

2 WV.

Greenbrier cavesnail
Fontigens turritella (Hubricht, 1976)

2 WV.

Spiny riversnail
Io fluviatilis (Say, 1834)

1 TN, VA.

Shaggy coil
Helicodiscus tiadema Grimm, 1967

2 VA.

Maryland glyph
Glyphyalinia caderi (Dall, 1898)

2 KY, MD, VA, WV.

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Shrimp, Alabama cave	<i>Palaemonias alabamiae</i>	U.S.A. (AL)	NA	E	323	NA	NA
Shrimp, California freshwater	<i>Syncaris pacifica</i>	U.S.A. (CA)	NA	E	340	NA	NA
Shrimp, Kentucky cave	<i>Palaemonias ganteri</i>	U.S.A. (KY)	NA	E	135	17.95(h)	NA
INSECTS							
Beetle, Am. Burying	<i>Elaphrus viridis</i>	U.S.A. (CA)	NA	T	100	17.95(i)	NA
Beetle, delta green ground	<i>Texamaurops reddelli</i>	U.S.A. (TX)	NA	E	327	NA	NA
Beetle, Kretschmarr Cave mold	<i>Rhadine persephone</i>	do.....	NA	E	327	NA	NA
Beetle, Tooth Cave ground	<i>Desmocerus californicus dimorphus</i>	U.S.A. (CA)	NA	T	99	17.95(i)	NA
Beetle, valley elderberry longhorn	<i>Euphydryas editha bayensis</i>	do.....	NA	T	288	NA	NA
Butterfly, bay checkerspot	<i>Euphydryas editha bayensis</i>	do.....	NA	E	14	NA	NA
Butterfly, El Segundo blue	<i>Euphilotes (=Shijimiaeoides) battoides allyni</i>	do.....	NA	E	14	NA	NA
Butterfly, Lange's metalmark	<i>Apodemia mormo langei</i>	do.....	NA	E	14	NA	NA
Butterfly, lotis blue	<i>Lycaeides argyrognomon lotis</i>	do.....	NA	E	14	NA	NA
Butterfly, mission blue	<i>Icaricia icarioides missionensis</i>	do.....	NA	E	14	NA	NA
Butterfly, Oregon silverspot	<i>Speyeria zerene hippolyta</i>	U.S.A. (OR, WA)	NA	T	95	17.95(i)	NA
Butterfly, Palos Verdes blue	<i>Glaucopsyche lygdamus palosverdesensis</i>	U.S.A. (CA)	NA	E	96	17.95(i)	NA
Butterfly, San Bruno elfin	<i>Callophrys mossii bayensis</i>	do.....	NA	E	14	NA	NA
Butterfly, Schaus swallowtail	<i>Heraclides (=Papilio) aristodemus ponceanus</i>	U.S.A. (FL)	NA	E	13,159	NA	NA
Butterfly, Smith's blue	<i>Euphilotes (=Shijimiaeoides) enoptes smithi</i>	U.S.A. (CA)	NA	E	14	NA	NA
Moth, Kern primrose sphinx	<i>Euproserpinus euterpe</i>	do.....	NA	T	91	NA	NA
Naucorid, Ash Meadows	<i>Ambrysus amargosus</i>	U.S.A. (NV)	NA	T	181	17.95(i)	NA
Skipper, Pawnee montane	<i>Hesperia leonardus (=pawnee) montana</i>	U.S.A. (CO)	NA	T	289	NA	NA
ARACHNIDS							
Harvestman, Bee Creek Cave	<i>Texella reddelli</i>	U.S.A. (TX)	NA	E	327	NA	NA
Pseudoscorpion, Tooth Cave	<i>Microcreagris texana</i>	do.....	NA	E	327	NA	NA
Spider, Tooth Cave	<i>Leptoneta myopica</i>	do.....	NA	E	327	NA	NA

Symbols used in the "when listed" column:

D—Indicates FR where species was Delisted; relisting of the species is indicated by subsequent number(s).

E—Indicates Emergency rule publication (see FR document for effective dates); subsequent number(s) indicate FR final rule, if applicable, under "When listed".

EDITORIAL NOTE: See the following list for the "when listed" citations.

Federal End. Spp.
List of Insects-1988

★ More species
(including the Am. Burying
Beetle) have been
included since