

FAMILY DYTISCIDAE (Predaceous diving beetles)

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Two hundred and sixty species of Dytiscidae are known from Canada and Alaska, making this the largest family of aquatic beetles in the region. These beetles occur in a wide variety of shallow water habitats. The richest fauna is in the emergent vegetation zone along the edges of pools, small ponds and small, slow streams. A number of species are characteristic of cold water habitats such as small seepages and springs, and bog, forest, alpine and arctic pools. Clear, gravelly streams and saline ponds each contain distinctive groups of species.

Adults are predators or scavengers on dead animals while all larvae are apparently predaceous. The range of prey taken probably is determined by what prey of suitable size is available, but some hydroponines feed largely on microcrustacea while some colymbetines prey mainly on culicid larvae. As far as is known or can be inferred, all species in the fauna are univoltine or semivoltine. Most species overwinter as adults but timing of breeding and occurrence of larval stages vary greatly among species. Representative larvae of most genera have been described, but larvae are known for only a small percentage of species.

The family is relatively well known taxonomically. The principal taxonomic problems include: relating the northern Nearctic fauna with that of the Palaearctic; analysing and interpreting patterns of geographical variation which in many species are complex; development of supraspecific classification, especially within the larger genera. Identification of species may be very difficult as differences between species are often subtle thus there is a need for additional character analysis to provide better species definitions and characters for their recognition. Reviews and revisions of many genera have been, or are being, prepared but no single publication treats the entire fauna. The regional works of Hatch (1953) and Larson (1975) together cover most of the western and boreal species. Fairly complete faunal lists exist for Manitoba (Wallis 1973) and Newfoundland (Larson and Colbo 1983). Good keys to adults and larvae of most North American genera are given by Leech and Chandler (1956) and White et al. (1984). Within the United States, a number of works treating the fauna of various states exist. Some of these that are especially valuable aids in interpreting the Canadian fauna are: California (Leech and Chandler 1956), Florida (Young 1954), Maine (Malcolm 1971), Nevada (La Rivers 1951), North Dakota (Gordon and Post 1965), North and South Carolina (Brigham 1982), and Utah (Anderson 1962). Zaitzev (1953) outlined the Palaearctic distribution of Holarctic species.

AK (92); YK (111); NT (119); BC (168); AB (151); SK (124); MB (145); ON (152); PQ (146); NB (82); NS (78); PE (32); LB (74); NF (78); H (45)

Subfamily COPELATINAE Tribe Copelatini

Genus COPELATUS Erichson

Key to North American species: Young (1963a)

C. chevrolati Aubé	-	-	-	-	-	-	-	-	ON	-	-	-	-		
renovatus Guignot															
C. glyphicus (Say)	-	-	-	-	-	-	-	-	ON	PQ	-	NS	PE	-	NF

Subfamily LACCOPHILINAE Tribe Laccophilini

Genus LACCOPHILUS Leach

Key to North American species: Zimmerman (1970)

L. biguttatus Kirby*	AK	YK	NT	BC	AB	SK	MB	ON	PQ	NB	-	-	LB	-
inconspicuus Fall														
stroehmi C.G.Thomson														
L. maculosus Say	-	-	-	BC	AB	SK	MB	ON	PQ	NB	NS	PE	-	-
californicus Motschulsky														
descipiens LeConte														
fusculus Sharp														
shermanni Leech														
truncatus Mannerheim														
L. proximus Say	-	-	-	-	-	-	-	-	-	ON	-	-	-	-
americanus Aubé														
confusus Sharp														
L. undatus Aubé	-	-	-	-	-	-	-	-	-	ON	-	-	-	-

Subfamily METHLINAE Tribe Methlini

Genus CELINA Aubé

Key to North American species: Young (1979b)

C. hubbelli Young

- - - - - ON PQ - - - - -

Subfamily HYDROPORINAE
Tribe Hydrovatini

Genus HYDROVATUS Motschulsky

Key to North American species: Young (1956, 1963b)

H. pustulatus (Melsheimer)

compressus Sharp

cuspidatus auct. amer.

- - - - - ON PQ - - - - -

Tribe Hyphydrini

Genus DESMOPACHRIA Babington

Key to North American species: Young (1980, 1981)

D. convexa (Aubé)

- - NT BC AB SK MB ON PQ NB NS PE - -

Tribe Bidessini

Key to genera: Young (1967)

Genus BIDESSONOTUS Régimbart

Key to North American species: Balfour-Browne (1947)

B. inconspicuus (LeConte)

- - - - - ON PQ - NS - - -

Genus LIODESSUS Guignot

L. affinis (Say)

AK YK NT BC AB SK MB ON PQ NB NS PE - NF

charlotti (Clark)

emilianus (Clark)

macularis (LeConte)

microreticulatus (Hatch)

nanus (Aubé)

nigrinus (Casey)

obscurellus (LeConte)

s-erythrostomus (Mannerheim)

L. cantralli (Young)

- - - - AB SK MB - - - - - - -

L. flavidollis (LeConte)

- - - - - MB ON PQ - - - - -

L. fuscatus (Crotch)

- - - - SK MB ON PQ - NS - LB -

Genus NEOCLYPEODYTES Young

N. ornatellus (Fall)

- - - - BC - - - - - - - - - -

Genus UVARUS Guignot

U. granarius (Aubé)

- - - - - MB ON PQ NB NS - - -

U. lacustris (Say)

- - - - - ON - - - - - - -

U. subplicatus (Hatch)

- - - BC - - - - - - - - - - -

Tribe Hydroporini

Genus HYGROTUS Stephens

Coelambus C.G.Thomson

Key to North American species: Anderson (1971, 1976, 1983)

H. acaroides (LeConte)	- - - - -	MB	- - - - -	- - - - -
winnipeg (Wallis)				
H. compar (Fall)	AK - - - -	BC AB SK MB ON PQ NB	- - - - LB	- - - -
H. dissimilis Gemminger & Harold	- - - - -	BC AB - MB ON PQ	- - - -	- - - -
dispar (LeConte)				
H. falli (Wallis)	- - - - -	ON PQ	- - - - NF	- - - -
H. farctus (LeConte)	- - - - -	AB SK MB - PQ NB	- - - -	- - - -
H. impressopunctatus (Schaller)*	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF			
similis (Kirby)				
H. infuscatus (Sharp)	- YK NT BC AB SK MB	- - - - -	- - - - -	- - - - -
dentiger (Fall)				
oregonus (Fall)				
H. intermedius (Fall)	- - - - BC	- - - - -	- - - - -	- - - - -
H. laccophilinus (LeConte)	- - NT - -	SK MB ON PQ NB NS	- - - -	- - - -
H. lutescens (LeConte)	AK - - BC	- - - - -	- - - - -	- - - - -
impressifrons Motschulsky				
infacetus (Clark)				
medialis (LeConte)				
H. marklini (Gyllenhal)*	AK YK NT - AB SK MB	- PQ	- - - -	- - - - NF
canadensis (Fall)				
virgo (Fall)				
H. masculinus (Crotch)	- - - BC AB SK MB	- - - - -	- - - - -	- - - - -
fastidiosus (Fall)				
H. nigrescens (Fall)	- - - BC	- - - - -	- - - - -	- - - - -
H. novemlineatus hudsonicus (Fall)*	AK YK NT - - -	MB - PQ	- - - -	- - - -
H. nubilus (LeConte)	- - - - -	ON PQ NB NS	- - - -	- - - -
H. obscureplagiatus (Fall)	- - - BC	- - - - -	- - - - -	- - - - -
columbianus (W.J.Brown)				
H. patruelis (LeConte)	AK YK NT BC AB SK MB ON PQ	- - - -	LB NF	
borealis (Fall)				
discoideus (LeConte)				
quebecensis (W.J.Brown)				
H. picatus (Kirby)	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF			
H. punctilineatus (Fall)	- YK - BC AB SK MB ON	- - - -	- - - -	- - - -
H. salinarius (Wallis)	- - NT - AB SK MB	- - - -	- - - -	- - - -
H. sayi Balfour-Browne	- YK NT BC AB SK MB ON PQ NB NS PE LB NF			
punctatus (Say)				
H. sellatus (LeConte)	- - NT - AB SK MB ON	- - - -	- - - -	- - - -
H. semivittatus (Fall)	- - - BC AB - MB	- - - -	- - - -	- - - -
H. suturalis (LeConte)	AK YK NT BC AB SK MB ON PQ	- - - -	LB NF	
ovoideus (LeConte)				
H. sylvanus (Fall)	- - - - - ON PQ	- - - -	- - - -	- - - -
H. tumidiventris (Fall)	- - - NT BC AB SK MB ON	- - - -	- - - -	- - - -
H. turbidus (LeConte)	AK YK NT BC AB SK MB ON PQ	- NS PE	- - - -	
H. unguicularis (Crotch)*	AK YK NT BC AB SK MB - PQ	- - - -	LB NF	
mongolicus (Jakovlev)				

Genus HYDROPORUS Clairville

(Subgenus HETEROSTERNUTA Strand)

(Heterosternus Zimmermann)
(Heterostethus Falkenstrom)

Key to species: Matta & Wolfe (1981)

H. alleghenianus Matta & Wolfe	- - - - -	PQ NB	- - - -	- - - -
H. cocheconis Fall	- - - - -	PQ	- - - -	- - - -
H. pulcher LeConte	- - - - -	ON PQ NB NS	-	LB NF
H. wickhami Zaitzev	- - - - -	ON PQ NB	- - - -	- - - -
concininus LeConte				

(Subgenus SANFILIPPODYTES Franciscolo)

H. browni Wallis	- - - BC - - - - - - - - - - - -
H. brumalis W.J.Brown	- - - - - - - - - PQ - - - - - - - -
H. compertus W.J.Brown	- - - BC AB - - - - - - - - - - - -
H. edwardsi Wallis	- - - BC AB - - - - - - - - - - - -
H. falsificus W.J.Brown	- - - BC - - - - - - - - - - - - - -
H. pacificus Fall	- - - BC - - - - - - - - - - - - - -
H. planiusculus Fall	- - - BC AB SK MB ON PQ - - - LB NF
H. terminalis Sharp	- - - BC - - - - - - - - - - - - - -

Incertae sedis

H. acadianus Balfour-Browne	- - - - - - - - - NS - - - -
H. persimilis Crotch	- - - - - - - - - PQ - NS - LB NF
aequus Fall	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
H. paugus Fall	- YK NT BC AB SK MB ON PQ NB - - LB NF
H. rubyae Larson	- - NT - AB SK MB ON PQ NB NS PE - NF
H. stagnalis Gemminger & Harold	
collaris LeConte	

(Subgenus NEOPORUS Guignot)
(Circinoporus Guignot)

Key to species: Fall (1923) & Wolfe (1984)

H. carolinus Fall	- - - - - - - - - ON PQ NB NS - LB NF
H. clypealis Sharp	- - - - - - - - - ON PQ NB NS - - NF
anticus Sharp	
H. dilatatus Fall	- - - - - - - - - NB - - - -
H. dimidiatus Gemminger & Harold	- - - - - AB - - - - - - - -
semirufus LeConte	
H. mellitus LeConte	- - - - - - - - - ON PQ NB - - - -
H. solitarius Sharp	- - - - - SK MB ON PQ NB NS PE LB NF
H. spurius LeConte	- - - - - - - - - ON PQ NB - - - -
peltatus Sharp	
H. sulcipennis Fall	- - - - - - - - - PQ NB - - - -
H. superioris Balfour-Browne	- - NT BC AB SK MB ON - - - - - -
sericeus LeConte	
H. tennetum Wolfe	- - - - - - - - - ON - - - - - -
H. undulatus Say	- - NT BC AB SK MB ON PQ NB NS PE LB NF
anticus Sharp	
consimilis LeConte	
fasciatus Harris	
placatus Fall	
pubipennis Aubé	
punctatissimus Aubé	
scrutator Sharp	
velutinus Aubé	
H. vittatus LeConte	- - - - - AB SK MB ON - - - - - -
H. vitiosus LeConte	- - - - - - - - - ON PQ - - - - - -

(Subgenus HYDROPORUS s.str.)

Key to North American species: Fall (1923)

H. americanus Aubé	- - - - - - - - - NS - - - -
H. appalachius Sherman	- - YK NT BC AB SK MB ON PQ - - - -
signatus Sharp	
H. badiellus Fall	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
H. brevicornis Fall	- - - - - - - - - PQ NB NS - LB NF
H. carri Larson	- - - - - AB - - - - - - - -
H. columbianus Fall	- - YK NT BC AB SK MB ON PQ NB - - - -
H. dentellus Fall	AK YK NT BC AB SK MB ON PQ NB NS PE LB -
H. despectus Sharp	- - YK NT BC AB - MB ON PQ - NS - - NF
rusticus Sharp	
H. dichrous Melsheimer	- - - - - - - - - ON PQ - - - -
discicollis Say	
H. fatigus Gordon	- - - - BC - - - - - - - - -
H. fortis LeConte	- - - - BC - - - - - - - - -
H. funestus Fall	- - - - BC - SK - - - - - - - -
H. fuscipennis Schaum*	AK YK NT BC AB SK MB ON PQ NB - - LB NF

<i>H. criniticoxis</i> Larson	
<i>piceus</i> Sturm	
<i>puberulus</i> Mannerheim	
<i>H. lapponum</i> Gyllenhal	AK YK NT BC - - MB ON PQ - - - LB NF
<i>labradorensis</i> Fall	- YK NT BC AB SK MB - PQ - - - LB -
<i>H. larsoni</i> Nilsson	AK - - BC - - - - - - - - -
<i>H. longiusculus</i> Gemminger & Harold	AK YK NT BC AB - - - - - - - - -
<i>oblongus</i> Aubé	- - - - - - - - - ON PQ - - - - -
<i>H. mannerheimi</i> Balfour-Browne	AK YK NT BC AB SK MB ON PQ - - - LB NF
<i>humeralis</i> Aubé	- - - - - - - - - ON PQ NB NS PE - NF
<i>H. melsheimeri</i> Fall	AK YK NT BC AB SK MB ON PQ - - - LB NF
<i>H. morio</i> Aubé*	AK YK NT BC AB SK MB ON PQ NB - - LB NF
<i>caliginosus</i> LeConte	- - - - - - - - - ON PQ NB NS PE - NF
<i>melanocephalus</i> Gyllenhal	AK YK NT BC AB SK MB ON PQ - - - LB NF
<i>H. nigellus</i> Mannerheim*	AK YK NT BC AB SK MB ON PQ NB - - LB NF
<i>H. niger</i> Say	- - - - - - - - - ON PQ NB NS PE - NF
<i>latifrons</i> Sharp	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
<i>modestus</i> Aubé	AK YK NT BC AB SK MB ON PQ NB - - LB NF
<i>H. notabilis</i> LeConte	- YK - BC AB SK - - - - - - - - -
<i>arcticus</i> C.G.Thomson	- - - BC AB SK MB - - - - - - - - -
<i>H. obscurus</i> Sturm*	AK YK NT - - - MB - PQ - - - - - - -
<i>hockingi</i> Larson	AK YK NT BC AB - MB ON PQ NB - - LB NF
<i>H. occidentalis</i> Sharp	AK YK NT BC AB SK MB ON PQ NB - - LB NF
<i>H. pervicus</i> Fall	AK YK NT BC AB SK MB ON PQ - NS - - -
<i>H. polaris</i> Fall	AK YK NT - - - - - - - - - - - - -
<i>subvirescens</i> Fall	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
<i>H. puberulus</i> LeConte*	- - - - - - - - - - - - - - -
<i>levanderi</i> J.Sahlberg	AK YK NT BC AB SK MB ON PQ NB - - LB NF
<i>H. rectus</i> Fall	AK YK NT BC AB SK MB ON PQ - - - LB NF
<i>H. rufinasus</i> Mannerheim	AK YK NT BC AB SK MB ON PQ - NS - - -
<i>H. sibiricus</i> J.Sahlberg*	AK YK NT - - - - - - - - - - - - -
<i>boreus</i> Gordon	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
<i>H. signatus</i> Mannerheim	- - - - - - - - - - - - - - -
<i>inornatus</i> Sharp	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
<i>youngi</i> Gordon	- - - - - - - - - - - - - - -
<i>H. similaris</i> Fall	- - - - - BC - - - - - - - - - - -
<i>H. sinuatipes</i> Fall	- - - - - BC - - - - - - - - - - -
<i>H. striola</i> (Gyllenhal)*	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
<i>ambiguus</i> Aubé	- - - - - - - - - - - - - - -
<i>subtonsus</i> LeConte	AK YK NT BC AB - MB ON PQ - - - - -
<i>vittula</i> Erichson	- - - - - - - - - - - - - - -
<i>H. tademus</i> Leech	- - - - - BC AB - - - - - - - - - -
<i>H. tartaricus</i> LeConte*	AK YK NT BC AB - MB ON PQ - - - - -
<i>caminarius</i> Motschulsky	- - - - - - - - - - - - - - -
<i>lugubris</i> Motschulsky	AK YK NT BC AB SK MB ON PQ - NS - - NF
<i>melancholicus</i> Motschulsky	- - - - - - - - - - - - - - -
<i>H. tenebrosus</i> LeConte	- - - - - BC AB - - - - - - - - -
<i>luridipennis</i> LeConte	AK YK NT BC AB SK MB ON PQ - - - - -
<i>lutulentus</i> LeConte	- - - - - - - - - - - - - - -
<i>H. transpunctatus</i> H.P.Chandler	- - - - - BC AB - - - - - - - - -
<i>H. tristis</i> (Paykull)*	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
<i>elongatulus</i> Schiodte	- - - - - - - - - - - - - - -
<i>ruficapillus</i> Mannerheim	- - - - - - - - - - - - - - -
<i>varians</i> LeConte	- - - - - - - - - - - - - - -

Genus POTAMONECTES Zimmermann

Deronectes auct. amer.

Potamodytes Zimmermann

Key to North American species: Zimmerman & Smith (1975a)

<i>P. aequinoctialis</i> (Clark)	- - - - - AB - - - - - - - - - -
<i>P. deceptus</i> (Fall)	- - - - - BC - - - - - - - - - -
<i>P. depressus</i> (Fabricius)*	- - - NT - AB - MB - - - - - - - -
<i>P. elegans</i> (Panzer)*	- - - - - BC AB SK MB ON - - - - -
<i>P. griseostriatus</i> (DeGeer)*	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
<i>catascopium</i> (Say)	- - - - - - - - - - - - - - -
<i>coloradensis</i> (Fall)	- - - - - - - - - - - - - - -

<i>P. mathiasi</i> (Hatch)	-	-	-	-	-	-	ON	PQ	NB	NS	PE	LB	NF
<i>P. parallelus</i> (Say)	-	YK	-	BC	AB	SK	MB	-	-	-	-	-	-
<i>P. suffusus</i> (Sharp)	-	YK	NT	BC	AB	SK	MB	-	-	-	-	-	-
<i>P. rotundatus</i> (LeConte)	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>P. spenceri</i> (Leech)	-	YK	-	BC	AB	SK	MB	-	-	-	-	-	-
<i>P. striatellus</i> (LeConte)	-	YK	NT	BC	AB	SK	MB	-	-	-	-	-	-
<i>infaustus</i> (Clark)	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>pulcher</i> (Motschulsky)	-	-	-	-	-	-	-	-	-	-	-	-	-

Genus OREODYTES Seidlitz

Key to North American species: Zimmerman (1985)

<i>O. alaskanus</i> (Fall)	AK	YK	-	BC	AB	-	-	-	-	-	-	-	-
<i>productotruncatus</i> (Hatch)	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>rainieri</i> (Hatch)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>recticollis</i> (Fall)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. angustior</i> (Hatch)	-	-	-	BC	-	-	-	-	-	-	-	-	-
<i>O. congruus</i> (LeConte)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. crassulus</i> (Fall)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. laevis</i> (Kirby)	AK	YK	NT	BC	AB	-	MB	ON	PQ	-	-	LB	NF
<i>duodecimlineatus</i> (LeConte)	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>hortensis</i> (Hatch)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>semiclarus</i> (Fall)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>yukonensis</i> (Fall)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. leechi</i> Zimmerman	AK	YK	-	-	-	-	-	-	-	-	-	-	-
<i>O. obesus</i> (LeConte)	-	YK	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. picturatus</i> (Horn)	-	-	-	BC	-	-	-	-	-	-	-	-	-
<i>O. quadrimaculatus</i> (Horn)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>brodei</i> (Gellerman)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. sanmarkii</i> (C.R.Sahlberg)*	-	YK	NT	-	-	-	-	-	-	-	-	-	-
<i>rivalis</i> (Gyllenhal)	-	-	-	BC	AB	SK	MB	ON	PQ	NB	NS	-	NF
<i>O. scitulus</i> (LeConte)	-	-	NT	BC	AB	SK	MB	ON	PQ	NB	NS	-	-
<i>bisulcatus</i> (Fall)	-	-	-	BC	AB	-	-	-	-	-	-	-	-
<i>O. snoqualmie</i> (Hatch)	-	-	-	BC	AB	-	-	-	-	-	-	-	-

Genus LACCORNIS des Gozis

Agaporus Zimmermann

Key to North American species: Wolfe & Spangler (1985)

<i>L. conoideus</i> (LeConte)	-	YK	NT	BC	AB	SK	MB	ON	PQ	NB	-	-	NF
<i>L. deltoides</i> (Fall)	-	-	-	-	-	-	-	ON	-	-	-	-	-
<i>L. latens</i> (Fall)	-	-	-	-	-	-	-	ON	PQ	NB	-	-	-
<i>L. oblongus</i> (Stephens)*	-	-	NT	-	-	-	-	-	-	-	-	-	-
<i>L. pacificus</i> Leech	-	-	-	BC	AB	-	-	-	-	-	-	-	-

Subfamily COLYMBETINAE

Tribe Agabini

Key to North American genera: Leech (1942)

Genus AGABINUS Crotch

Key to species: Leech (1941)

<i>A. glabrellus</i> (Motschulsky)	-	-	-	BC	-	-	-	-	-	-	-	-	-
<i>A. sculpturellus</i> Zimmermann	-	-	-	BC	-	-	-	-	-	-	-	-	-

Genus AGABUS Leach

Allonychus Zaitzev

Anisomera LeConte

Apator Semenov

Arctodytes C.G.Thomson

Gauromydas C.G.Thomson

Heteronychus Seidlitz

Ilybius Crotch

Key to North American species: Fall (1922b)

A. adpressus Aubé*	AK YK NT BC - - - - - - - - - -
solus Leech	- - - - - - - - ON - - - - - -
A. aeruginosus Aubé	- - - - - - - -
dispositus Guignot	- YK NT BC AB SK MB ON PQ - - - LB -
A. ajax Fall	- YK - BC AB SK MB ON PQ NB NS PE LB NF
fuscipennis auct. amer.	-
A. ambiguus (Say)	AK YK NT BC AB SK MB ON PQ - - - LB -
fimbriatus LeConte	-
reticulatus Aubé	-
A. antennatus Leech	AK YK NT BC AB SK MB ON PQ - - - LB -
clavatus LeConte	-
A. anthracinus Mannerheim	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
scapularis Mannerheim	- - NT BC AB SK - - - - - -
A. approximatus Fall	- AK YK NT BC AB SK MB ON PQ - - - LB NF
A. arcticus (Paykull)*	-
reticulatus (Kirby)	-
subfasciatus LeConte	-
A. audeni Wallis	AK YK NT BC AB SK MB - - - - - -
A. austini Sharp	AK YK NT BC AB - - - - - -
A. bicolor (Kirby)	AK YK NT BC AB SK MB ON - - NS - -
mutus Sharp	-
A. bifarius (Kirby)*	AK YK NT BC AB SK MB ON PQ NB NS - LB -
kessleri Hochhuth	- - - BC AB - - - - - -
A. bjorkmanae Hatch	- - YK - BC AB SK MB - - - - - -
rectus (LeConte)	AK YK NT BC - SK MB - - - - - -
A. canadensis Fall	- - YK NT - - - MB - - - - - -
A. clavicornis Sharp*	- - - BC - - - - - -
verus W.J.Brown	AK YK NT BC AB SK MB ON PQ - NS - LB NF
A. columbus Leech	- - YK NT - - - MB - - - - - -
A. confertus LeConte	- - - BC - - - - - -
A. confinis (Gyllenhal)*	AK YK NT BC AB SK MB - - - - - -
longulus (LeConte)	-
ovoideus (Crotch)	-
A. coxalis Sharp*	AK YK NT BC - - - - - - - - - -
A. discolor (Harris)	AK YK NT BC AB SK MB ON PQ NB NS PE LB -
A. discors LeConte	- - - BC - - - - - -
A. disintegratus (Crotch)	- - - - - - ON PQ - - - -
A. elongatus (Gyllenhal)*	AK YK NT BC AB SK MB - - - - - -
bryanti Carr	-
A. erichsoni Gemminger & Harold*	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
lutosus (Crotch)	-
nigroaneus Erichson	-
sobrinus Motschulsky	-
A. erythropterus (Say)	- - - - - - - - ON PQ NB NS - - NF
A. falli (Zimmermann)	- - - - AB SK MB ON PQ - - - -
semipunctatus auct. amer.	-
sharpí Fall	-
A. fuscipennis (Paykull)*	AK YK NT BC AB SK MB ON - - - - - -
ontarionis Fall	-
A. gagates Aubé	- - - - - - - - ON PQ NB NS - -
A. hypomelas Mannerheim	AK - - BC AB - - - - - -
irregularis Mannerheim	-
A. infuscatus Aubé	AK YK NT BC AB - MB ON PQ - - - LB NF
A. inscriptus (Crotch)	AK YK NT BC AB SK MB ON PQ - NS - LB NF
A. leptapsis (LeConte)	- YK - BC AB SK MB ON PQ NB NS - LB NF
A. lugens LeConte	- - - BC - - - - - -
perplexus Sharp	-
suturalis (Crotch)	-
A. lutosus LeConte	- - - BC AB SK - - - - - -
discolor LeConte	-
lecontei (Crotch)	-
mimus Leech	-
A. margaretae Larson	- - - - AB SK - - - - - -
A. moestus (Curtis)*	AK YK NT - - - MB ON PQ - - - -
borealis Sharp	-
nigripalpis (J.Sahlberg)	-
A. nectris Leech	- - - BC AB SK - - - - - -

A. oblongulus Fall	- - - BC - - - - - - - - - -
A. obtusatus (Say)	- - - - - - - ON PQ NB NS - - -
nitidus (Say)	
A. opacus Aubé*	AK YK NT BC AB SK MB ON PQ NB - - LB NF
gelidus Fall	
pseudoconfertus Wallis	
sharpí Jacobson	
A. phaeopterus (Kirby)	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
A. pisobius Leech	- - - BC AB - - - - - - - -
A. punctulatus Aubé	- - YK - - AB SK MB ON PQ NB - - LB -
aeneolus (Crotch)	
A. semipunctatus (Kirby)	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
stridulator Sharp	
A. semivittatus LeConte	- - - - - - - ON PQ - - - -
spilotus LeConte	
texanus Sharp	
A. seriatus (Say)	- YK NT BC AB SK MB ON PQ NB NS - LB NF
arctus Melsheimer	
intersectus Crotch	
parallelus LeConte	
striatus Aubé	
A. smithi W.J.Brown	- - - BC AB - - - - - - - -
A. strigulosus (Crotch)	AK YK NT BC AB SK MB - - - - - -
nanus (LeConte)	
A. subfuscatus Sharp	- - - - - - MB ON PQ NB NS PE - -
A. thomsoni (J.Sahlberg)*	AK YK NT BC AB SK MB - PQ - - - LB NF
A. tristis Aubé*	AK YK NT BC AB SK - - PQ - - - LB NF
atratus Mannerheim	
crotchi Zaitzev	
dubius Mannerheim	
piceus Zaitzev	
piceolus Zaitzev	
subopacus Mannerheim	
A. triton Fall	- - - - AB SK MB - - - - - -
A. vancouverensis Leech	AK - - BC - - - - - - - -
A. velox Leech	AK YK NT - - - MB - - - - -
A. verisimilis W.J.Brown	- - - BC AB - - - - - -
A. wasastjerna (C.R.Sahlberg)*	AK YK NT BC AB SK MB ON PQ - - - LB NF
kenaiensis Fall	
palustris Wallis	
A. zaitzewi Poppius*	AK YK NT - - - MB - - - - - -
hudsonicus Leech	
A. zetterstedti C.G.Thomson*	AK YK NT - - - MB - - - - - -
browni Leech	

Genus CARRHYDRUS Fall

C. crassipes Fall

- YK NT BC AB SK MB ON - - - - -

Genus ILYBIUS Erichson

Key to North American species: Larson (1987)

I. angustior (Gyllenhal)*	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
I. biguttulus (Germar)	- - - - - - MB ON PQ NB NS - - NF
laramaeus LeConte	
I. churchillensis Wallis	AK - NT - - - MB - - - - - -
I. confusus Aubé	- - - - - - - ON - - NS - -
denikei Wallis	
I. discedens Sharp	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
I. fraterculus (LeConte)	- - NT BC AB SK MB - - - - - -
I. ignarus (LeConte)	- - - - - - - ON PQ - NS - -
I. incarinatus Zimmermann	- - - - - - - ON PQ - - - -
I. oblitus Sharp	- - - - - - - ON - - - -
I. picipes (Kirby)*	AK YK NT BC AB SK MB ON PQ - - - LB NF
I. pleuriticus (LeConte)	- YK NT BC AB SK MB ON PQ NB NS PE LB NF
inversus Sharp	

I. quadrimaculatus Aubé	AK - - BC AB - - - - - - - -
I. subaeneus (Erichson)*	AK YK NT BC AB SK MB ON PQ - - - - LB NF
viridianeus Crotch	
I. vittiger (Gyllenhal)*	AK YK NT BC - - MB - - - - - -

Tribe Agabetini

Genus AGABETES Crotch

A. acuductus (Harris)	- - - - - - - - ON PQ - - - -
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Tribe Colymbetini

Genus COLYMBETES Clairville

 Cymatopterus Dejean

Key to North American species: Zimmerman (1981)

C. dahuricus Aubé*	AK YK NT BC AB SK MB ON - - - - - -
obscuratus Mannerheim	
seminiger LeConte	
C. densus LeConte	AK YK - BC AB SK MB - - - - - -
inaequalis Horn	
C. dolabratus (Paykull)*	AK YK NT BC - - MB - PQ - - - LB NF
drewsoni LeConte	
groenlandicus Aubé	
marginalis (Fabricius)	
thomsoni Sharp	
triseriatus Kirby	
C. exaratus LeConte	- YK NT BC AB SK MB - - - - - -
incognitus Zimmerman	
rugipennis Sharp	
C. paykulli Erichson*	- YK NT BC AB SK MB ON PQ NB NS - - NF
longulus LeConte	
C. sculptilis Harris	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF

Genus NEOSCUTOPTERUS Balfour-Browne

 Pseudoscutopterus Hatch

Key to species: Larson (1975)

N. angustus (LeConte)	- YK - BC AB SK MB ON PQ NB NS - LB NF
N. horni (Crotch)	AK YK NT BC AB SK MB ON PQ NB - - LB -

Genus RHANTUS Dejean

Key to North American species: Zimmerman & Smith (1975)

(Subgenus NARTUS Zaitzev)	
(Rantogiton des Gozis)	
R. sinuatus (LeConte)	- - NT BC AB SK MB ON PQ - NS - -
(Subgenus RHANTUS s.str.)	
R. binotatus (Harris)	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
aequalis Hatch	
assimilis (Kirby)	
divisus (Aubé)	
flavogriseus Crotch	
longipes Sharp	
obscurus Sharp	
plebeius Sharp	
R. consimilis Motschulsky	- - NT BC AB SK MB ON PQ - - - -

<i>R. frontalis</i> (Marsham)*	AK YK NT BC AB SK MB ON PQ - - - - -
<i>flavicollis</i> Eschscholtz	
<i>gyllenhali</i> (Castelnau)	
<i>notatus</i> (Fabricius)	
<i>punctatus</i> (Hope)	
<i>sericans</i> Sharp	
<i>suturalis</i> (Boisduval & Lacordaire)	
<i>R. gutticollis</i> (Say)	- - - - BC AB - - - - - - - - -
<i>dominguensis</i> Gemminger & Harold	
<i>hoppingi</i> Wallis	
<i>hubbelli</i> Hatch	
<i>maculicollis</i> (Aubé)	
<i>mexicanus</i> (Castelnau)	
<i>R. suturellus</i> (Harris)	AK YK NT BC AB SK MB ON PQ - NS - LB NF
<i>subopacus</i> (Mannerheim)	
<i>zimmermanni</i> Wallis	
<i>R. wallisi</i> Hatch	AK YK NT BC AB SK MB ON PQ NB NS - LB NF
<i>suturellus</i> auct.	

Tribe Coptotomini

Genus COPTOTOMUS Say

Key to Eastern North American species: Hilsenhoff (1980)

C. longulus LeConte - - - BC AB SK MB ON PQ NB NS PE - -
C. lenticus Hilsenhoff
C. loticus Hilsenhoff - - - - - - - - ON PQ - - - - -

Tribe Matini

Genus MATUS Aubé

Key to species: Young (1953)

M. bicarinatus (Say) - - - - - - - ON - - - - -
 M. ovatus ovatus Leech - - - - - - - ON PQ - - - - -
 blatchleyi Leech

Subfamily DYTISCINAE
Tribe Dytiscini

Genus DYTISCUS Linné

Leionotus Kirby

Ectenotus Kirby
Macrodytes C.G. Thomson

Key to North American species: Larson (1975)

D. alaskanus Balfour-Browne parvulus Motschulsky	AK YK NT BC AB SK MB ON PQ - - - LB NF
D. circumcinctus Ahrens* anxius Mannerheim ooligbukii Kirby	AK YK NT BC AB SK MB ON PQ - - - - -
D. cordieri Aubé sublimbatus LeConte	AK - NT BC AB SK MB ON PQ NB - - - -
D. dauricus Gebler* confluens Say franklinii Kirby frontalis Motschulsky ventralis Motschulsky vexatus Sharp	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
D. fasciventris Say	- YK NT BC AB SK MB ON PQ NB NS - LB -
D. harrisii Kirby	AK YK NT BC AB SK MB ON PQ NB NS - LB NF

D. hatchi Wallis	- - - - BC - - - - - - - - - - -
D. hybridus Aubé compar (Melsheimer)	- - - - AB SK MB ON PQ NB - - - - -
D. marginicollis LeConte albionicus Motschulsky	- - NT BC AB SK MB - - - - - - - -
D. fuscostriatus Motschulsky	
D. verticalis Say	- - - - - - - MB ON PQ NB NS PE - -

Tribe Hydaticini

Genus HYDATICUS Leach

Key to North American species: Roughley & Pengelly (1981)

(Subgenus HYDATICUS s.str.)

H. aruspex Clark*	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
americanus Sharp	
laevipennis C.G.Thomson	
modestus Sharp	
H. piceus LeConte	- - - - AB SK MB ON PQ - NS - - -

Tribe Aciliini

Genus ACILIUS Leach

Key to North American species: Hilsenhoff (1975)

A. abbreviatus Mannerheim	AK - - BC AB - - - - - - - - - -
oregonensis Crotch	
A. athabascae Larson	- - - - BC AB SK MB ON PQ - - - - - -
A. mediatus (Say)	- - - - - - - - - ON PQ NB NS - - -
maccullochii (Kirby)	
A. semisulcatus Aubé	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
A. sylvanus Hilsenhoff	- - - - - - - MB ON PQ - - - - -

Genus GRAPHODERUS Dejean

Key to North American species: Wallis (1939)

G. fasciatus (Harris)	- - - - - - - ON PQ - - - - - -
G. liberus (Say)	- - NT BC AB SK MB ON PQ NB NS - - NF
brunnipennis Aubé	
rugicollis Kirby	
thoracicus Harris	
G. Manitobensis Wallis	- - - - - - MB - - - - - - - -
G. occidentalis Horn	- - YK NT BC AB SK MB ON PQ - - - - -
G. perplexus Sharp	AK YK NT BC AB SK MB ON PQ NB NS PE LB NF
elatus Sharp	

Genus THERMONECTUS Dejean

T. basilaris (Harris)

- - - - - - - ON - - - - - - -

Tribe Cybisterini

Genus CYBISTER Curtis

C. fimbriolatus (Say)	- - NT BC - - MB ON - - NS - - -
crotchi Wilke	
olivieri Crotch	