AN ANNOTATED LIST OF NEARCTIC DONACIINAE (COLEOPTERA: CHRYSOMELIDAE): THE GENERIC CLASSIFICATION AND TYPE SPECIMENS OF THE NEW WORLD SPECIES.

BY INGOLF S. ASKEVOLD

Department of Entomology, University of Manitoba, Winnipeg, Manitoba, Canada R3T 2N2

INTRODUCTION

During systematic revision of Nearctic donaciines, the majority of type specimens were examined. Some lectotype and neotype designations, made where necessary in the context of revisions of genera (Plateumaris Thomson and Neohaemunia Székessy) or solution of specific taxonomic problems, were detailed elsewhere (Askevold 1987a,b, 1988, 1990, 1991). Some taxonomic problems remain despite relatively recent treatment by Marx (1957) of Donacia F. (sensu lato). I indicated earlier that Donacia is represented in North America by 10 species in Donacia (s. str.), and 21 described species in Donacia (Donaciomima) Medvedev, but details were not given then (Askevold 1990).

The purpose of the present paper is to detail remaining lectotype designations among Nearctic members of the genus Donacia F., to list the Nearctic members of Donaciinae, and to detail relevant taxonomic references and information (i.e., synonymies, taxonomic changes since prior authors, and data about type specimens). Schaeffer (1919, 1925) indicated only if he based his species on a type and allotype, but not that there were also many paratypes; paratype information is included insofar as such specimens have been found. Species are listed within genera and subgenera alphabetically rather than phylogenetically, because phylogenies have been reconstructed only for members of Plateumaris and Neohaemonia (Askevold 1991, 1988).

Present address: Entomology-Biological Control, Division of Agricultural Sciences, Florida A & M University, Tallahassee, FL 32307-2001

Manuscript received June 7, 1991.
The following list includes all described extant New World Donaciinae, serving to summarize the many taxonomic changes that have resulted from revision of North American Donaciinae. Details of historical use of species names is given where substantial changes in name use occurred [i.e., changes since Schaeffer (1925), Marx (1957) and Jolivet (1970)]. The taxonomic history of some names is complicated, often crossing generic boundaries; some species were synonymized with more than one taxon at once, based on composition of the original type series. I have judged that what is important is current synonymy and whether or not that differs from the most recent uses of names, and therefore have not pried deeply into tracing the varied uses of names since their original description.

Data of individual labels borne by type specimens, where recorded, are stated verbatim and are separated by a slash ("/"). The museums and private collections in which type specimens of any kind are known to be preserved are identified by corresponding codens:

AMNH. Department of Entomology, American Museum of Natural History, Central Park West at 79th St., New York, NY 10024, U.S.A.
APHIS. Animal and Plant Health Inspection Service, USDA, Room 308, 40 South Gay St., Baltimore, MD 21202, U.S.A.
BMNH. Department of Entomology, British Museum of Natural History, Cromwell Road, London SW7 5BD, England.
CAS. Department of Entomology, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118, U.S.A.
CDAS. California Department of Food and Agriculture, California State collection of Arthropods, Insect Taxonomy Laboratory, 1220 N Street, Sacramento, CA 95814, U.S.A.
CLCH. C. Chantal, B.P. 2072, St. Nicolas-est, P.Q., Canada, G0S 3L0.
CMP. Section of Entomology, Carnegie Museum of Natural History, 4400 Forbes Ave., Pittsburgh, PA 15213, U.S.A.
1991]  Askevold  167

CNC. Biosyntematics Research Centre, Agriculture Canada, Ottawa, Ont., Canada K1A 0C6.

CUIC. Department of Entomology, Comstock Hall, Cornell University, Ithaca, NY 14853, U.S.A.

DEFW. Department of Entomology, Fisheries and Wildlife, University of Minnesota, 219 Hodson Hall, 1980 Folwell Ave., St. Paul, MN 55108, U.S.A.

EGRC. E.G. Riley, Department of Entomology, Texas A & M University, College Station, TX 77843-2475, U.S.A.

FMNH. Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605, U.S.A.

FSCA. Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture, 1911 S.W. 34th St., P.O. Box 1269, Gainesville, FL 32602, U.S.A.

INHS. Department of Entomology, Illinois Natural History Survey, Natural Resources Bldg., Urbana, IL 61801, U.S.A.

ISAC. I.S. Askevold, Entomology-Biological Control, Division of Agricultural Sciences, Florida A & M University, Tallahassee, FL 32307, U.S.A.

JBWM. J.B. Wallis Museum, Department of Entomology, University of Manitoba, Winnipeg, Man. R3T 2N2, Canada.

LEM. Collection Provancher, Département de biologie, Université Laval, Québec, P.Q., G1K 7P4, Canada.

LSU. Department of Entomology, Louisiana State University, Baton Rouge, LA 70803, U.S.A.

MCZ. Department of Entomology, Museum of Comparative Zoology, Harvard University, Cambridge, MA 02138, U.S.A.

MLU. Section Biowissenschaften, WB Zoologie, Martin-Luther-Universität Halle-Wittenberg, Domplatz 4, 4010 Halle (Saale) Germany.

NMDC. N.M. Downie, 505 Lingle Terrace, Lafayette, IN 47901, U.S.A.

OSUC. Systematic Entomology Laboratory, Department of Entomology, Oregon State University, Corvallis, OR 97331, U.S.A.

PUR. Department of Entomology, Entomology Hall, Purdue University, West Lafayette, IN 47907, U.S.A.

ROM. Department of Entomology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ont. M5S 2C6, Canada.
Plateumaris Thomson (1859:154). Revision of genus by Askevold (1991). Rather than making numerous, repetitive statements about taxonomic details for this genus, users are referred to Askevold (1991) for details about type specimens. Unless otherwise stated, lectotype and neotype designations were made by Askevold (1991); a detailed account of the historical use of names is given there also, and not repeated here.


*P. balli* Askevold (1991). Holotype σ, CNC #19497, and 23 paratypes, ISAC, USNM, AMNH, CNC, APHIS, UAE, UVDZ, CAS and SMCL.

*P. diversa* (Schaeffer, 1925:143). Holotype φ, USNM #42397 and allotype σ, USNM.

*P. dubia* (Schaeffer, 1925:152). Holotype σ, USNM #4240-C, allotype φ USNM #42400 and 4 paratypes, USNM.

P. flavipes (Kirby, 1837:223). Holotype $\varphi$, BMNH. This name was used incorrectly by previous authors; the taxon previously known as P. flavipes is now called P. shoemakeri (Schaeffer). The taxon formerly called P. wallisi is now correctly called P. flavipes.

Donacia wallisi (Schaeffer, 1925:147). Holotype $\sigma$ USNM #42399, allotype $\varphi$ USNM #42399, and 13 paratypes, USNM. Synonymy with P. flavipes by Askevold (1991).

P. frosti (Schaeffer, 1925). Plateumaris frosti was formerly placed as a subspecies of P. emarginata (now P. nitida).

Donacia emarginata var. frosti Schaeffer (1925:136). Holotype $\sigma$, USNM #42395, allotype $\varphi$, USNM #42395, 28 paratypes, USNM, and 3 paratypes, MCZ.

P. fulvipes (Lacordaire, 1845:192). Holotype $\sigma$, BMNH.

P. germari (Mannerheim, 1843:306). Lectotype $\varphi$, MCZ #4250, and 1 syntype, UMHF.

Donacia flavipennis Mannerheim (1843:306). Lectotype $\sigma$, MCZ #4251, and 1 syntype, UMHF. Specimens from western Canada possessing flavous elytra and/or pronotum were given varietal status by Schaeffer (1925); Askevold (1991) gave no taxonomic status to specimens showing such variation. Synonymy with P. germari by Askevold (1991).

Donacia dives LeConte (1851:314). Holotype $\varphi$, MCZ #4245.

Donacia serricauda Schaeffer (1919:318). Holotype $\varphi$, USNM #42396.

P. metallica (Ahrens, 1810:33). Neotype $\sigma$, CNC #19493.

Donacia femoralis Kirby (1837:223). Lectotype $\varphi$, BMNH.

Donacia cataractae Newman (1838:391). Lectotype $\sigma$, BMNH.

Donacia parva Lacordaire (1845:190), Lectotype $\sigma$, BMNH.

Donacia indica Melsheimer (1847:158) (not Clark, 1866:1).
Lectotype $\varphi$, MCZ #33363.

Donacia nana Melsheimer (1847:160). Neotype $\sigma$, MCZ #32953.

Donacia gentilis LeConte (1851:314). Lectotype $\sigma$, MCZ #4249, and two paralectotypes MCZ #4249.
Psyche [Vol. 98]

*P. neomexicana* (Schaeffer, 1925:154). Holotype ♂, USNM #42401-1, allotype ♀ USNM #42401, three paratypes, USNM, and two paratypes, MCZ #27227 [Fall colln.].


*P. nitida* (Germar, 1811:31). Lectotype ♀ MLU. This name was used incorrectly by Schaeffer (1925); the species misidentified by Schaeffer as *P. nitida* is now called *P. schaefferi*. The taxon to which the name *P. nitida* applies was called *P. emarginata* by Schaeffer (1925) and other authors.


*P. notmani* (Schaeffer, 1925:132). Holotype ♂, USNM #42393, allotype ♀ #42393, and five paratypes, USNM, 1 paratype MCZ #27226 [Fall Coll.].

*P. pusilla* (Say, 1827:293). Neotype ♂, MCZ type #32950.

*Donacia rugifrons* Newman (1838:391). Types of this name have not been found, but should be in BMNH. Three specimens (of *P. rufa*, however, not *P. pusilla*) were found in the MCZ that are labelled Trenton Falls, New York, collected by Doubleday. Similar labels are borne by specimens of two other Newman species – *D. cineticornis* and *D. cataractae* – and I consider the possibility that these might be specimens of Newman’s *D. rugifrons*. 
Donacia pyritosa LeConte 1857(1860):66. Lectotype σ, MCZ type #4246. This name was formerly used as a variety of P. pusilla, but synonymized by Askevold (1991).

P. robusta (Schaeffer, 1919:318). This name was used as a variety of P. pusilla until elevated to species status by Askevold (1991).

Donacia pusilla var. robusta Schaeffer (1919:318). Holotype σ, USNM #42398, and 3 paratypes USNM #42398.

P. rufa (Say, 1827:283). Neotype σ, MCZ #32947. This species was formerly called P. sulcicollis Lac. The name D. rufa has been used incorrectly by authors (Marx 1957:250, Schaeffer 1925:117), and was transferred from Donacia to Plateumaris by Askevold (1991) [cf. also D. (Donaciomima) tuberculata Lacord., below].


P. schaefferi Askevold (1991). Holotype σ, USNM, and 7 paratypes, USNM, CUIC and UMMA.

Donacia nitida, sensu Schaeffer (1925:130) (see P. nitida, above).

P. shoemakeri (Schaeffer, 1925:129). This species was formerly incorrectly known as P. flavipes (see P. flavipes, above), validated by Askevold (1991).

Donacia flavipes var. shoemakeri Schaeffer (1925:129). Holotype σ, USNM #4239-1 and 5 paratypes USNM #42391.

Donacia flavipes var. lodingi Schaeffer (1925:129). Holotype σ, USNM #4239-2 and 1 paratype, USNM #42392. Southern
specimens, from Alabama, were given varietal status by Schaeffer (1925), but Askevold (1991) did not give this geographic variation taxonomic status.

**Poecilocera Schaeffer (1919:316).** Elevated to genus status by Askevold (1990)

*P. harrisii* (LeConte, 1851:316). Lectotype ♀ MCZ #4244, designated by Askevold (1990:635); the abdomen is now missing but was present when I first examined it. LeConte stated he had at least two specimens, ♂ and ♀, although only a single specimen remains in the LeConte collection. *P. harrisii* was placed in *Sominella* by Goecke (1931), but Marx (1957) reverted to placement in *Donacia (Poecilocera)*, evidently unaware of Goecke's treatment.

**Donaciinae Kirby, 1837**

**Donaciella Reitter (1920:38).** Elevated to genus by Askevold (1990), this name has been treated by European authors as a subgenus of *Donacia*, which has not been recognized in North America despite direct comparisons by Schaeffer (1925) with species occurring in the Palaearctic Region.

*D. pubicollis* (Suffrian, 1872:21). Transferred to *Donaciella* by Askevold (1990). Suffrian did not indicate the number of specimens before him, but given a range of size measurements, had at least two. A series of 12 specimens are preserved in MLU, associated with a Suffrian label. As determined previously (see *P. chalcea* and *P. nitida*, above) these specimens are also likely original Suffrian material, and are here designated. LECTOTYPE ♂, following a Suffrian label ["pubicollis m. Illinois", on large, green, black-bordered paper]: "25519 [red handwriting on small white label] / LECTOTYPE ♂ Donacia pubicollis Suffrian 1872 design. I.S. Askevold 1991". The remaining 11 specimens are here designated paralectotypes. These bear the same red, handwritten number and my paralectotype label: 25516 (♂), 25517 (♂), 25520 (♂), 25521 (♂), 25522 (♂), 25523 (♀), 25524 (♀), 25525 (♀), 25526 (♀), 33256 (♀) and 25518 (sex undetermined, abdomen missing).
Donacia pubicollis Crotch (1873:21) (not Suffrian, 1872:21). Synonymy with Donacia pubicollis Suffrian by Marx (1957). No specimens of Crotch's species were found at MCZ indicated as type, probably because it was not recognized that Crotch had also described the species, until Marx (1957). I presume the type must be lost, but it is hardly necessary to designate a neotype for such a well-known species.

Donacia (Donaciomima) Medvedev (1973:876). The subgenus Donaciomima was originally based on an eastern Palaearctic species, but was disregarded in subsequent treatments. All Nearctic species of Donacia were formerly placed in Donacia s. str., but Askevold (1990) revalidated Donacia (Donaciomima), and defined it to include the majority of species hitherto placed in the nominate subgenus. Most Nearctic species (23) of Donacia are included, of which two remain undescribed.


D. biimpressa Melsheimer (1847:159). Lectotype σ, MCZ #33365. Melsheimer had before him at least two specimens; the single remaining specimen is here designated as lectotype: “Melsh. biimpressa / Type [red] / biimpressa [large Melsheimer label, handwritten] / LECTOTYPE σ Donacia biimpressa Melsheimer design. I.S. Askevold 1990 [red] / MCZ. Lectotype 33365 [red]”.


*D. caerulea* Olivier (1795:10). Neotype σ, CNC #19492, designated by Askevold (1987b:347). Discussed by Askevold (1987b), this species was formerly known as *D. aequalis*; *D. caerulea* was used incorrectly by Schaeffer (1925) and Marx (1957), which they applied to certain specimens of *D. proxima*.


**Donacia confusa** Lacordaire (1845;109) (not LeConte, 1851). Lectotype σ, BMNH, designated by Askevold (1987b:347); placed in synonymy with *D. caerulea* by Askevold (1987b).

**Donacia confusa** LeConte (1851:313) (not Lacordaire, 1845). Lectotype σ, MCZ #32949, designated by Askevold (1987b:347); placed in synonymy with *D. caerulea* by Askevold (1987b).

*D. cazieri* Marx (1957:213). Holotype σ, CNC, allotype φ, CNC, four paratopotypes, CNC, and one paratopotype, AMNH, Goose Bay, Labrador (various dates and collectors, see Marx 1957).

**D. confluenta** Say (1827:293). Neotype σ, MCZ #32956, designated by Askevold (1987a:634); removed from synonymy with *D. subtilis* Kunze by Askevold (1987a).
Askevold 175

_**Donacia curticollis**_ Knab (1905:122) (not Haupt, 1956).


_**Donacia distincta**_ LeConte (1851:313). LeConte did not state the number or sex specimens before him; two specimens were found in the LeConte collection. Lectotype σ and paralectotype ϕ, MCZ #4242, here designated: “σ [pale blue disc] / LECTOTYPE [blue trimmed disc] / Type 4242 [red] / _D. distincta_ LeC. aequalis Kirby / LECTOTYPE ϕ Donacia distincta LeConte 1851 designated 1983 IS Askevold [red]” [specimen dissected, with genitalia placed in microvial pinned beneath specimen]; paralectotype ϕ, “ϕ [pale blue disc] / Type 4242 [red] / distincta 2 / J. LECONTE COLLECTION / PARALECTOTYPE ϕ Donacia distincta LeConte [red]”.


_**Donacia fulgens**_ LeConte (1851:312). Lectotype σ, MCZ #4240, designated by Askevold (1987a:634). At the time of this designation, another syntype specimen was not sent to me; I here add a ϕ paralectotype from the LeConte collection: “pale blue disc, two cuts / Type #4240 [red] / _D. fulgens_ LeC. / _J. LECONTE COLLECTION / PARALECTOTYPE ϕ Donacia fulgens LeConte [red]”]. Removed from synonymy of _**D. subtilis**_ Kunze by Brivio and Balsbaugh (1984).

_**Donacia hiricollis**_ Kirby (1837:226). Holotype σ, BMNH. Kirby stated he had before him a single specimen, which bears the following labels: “TYPE [red trimmed disc] / N. Amer. 5954a
Psyche

[white disc] / Donacia hirticollis Kirby N. Amer. 5954 Rev. Wm. Kirby [type, on underside]”. The specimen lacks the right fore leg and left hind leg, and right elytron smashed by pin.


D. liebecki Schaeffer (1919:314). Holotype σ, USNM #42390:
“Type σ / Wyandanch L Isld. / Brooklyn Museum Colln. 1929 / liebecki type USNM 42390 [red] / Donacia liebecki Schffr. [red bordered]”. Allotype φ: “Type φ Allotype / Wyandanch L Isld. / liebecki Schffr. Allotype USNM 42390 [red] / Brooklyn Museum Colln. 1929”. Five paratypes MCZ #27228 (two ex Fall Colln.), Malaga 1.8 N.J. One specimen labelled as a paratype (USNM) may be a paratype, though it does not bear labels indicating it is part of the original syntype series of 11 specimens: “Lakehurst NJ / Ed. A. Bischoff Collection / Brooklyn Museum Colln. 1929 / liebecki USNM paratype ? 42390 [red]”. Another specimen labelled as a paratype (USNM) cannot be a paratype because it is from Wading River, Long Island, a locality not mentioned by Schaeffer.

Donacia pallipes Lacordaire (1845:149) (not Kunze, 1818). Holotype φ, BMNH. Lacordaire had before him a single specimen which he supposed to be male. It is female, however. “TYPE [red trimmed disc] / TYPE [white] / 67.56 / D. pallipes Lac. σ type / Donacia type 32. pallipes Lac. 119 39 Philadelp Am. Sept. Boston D. Green [green, folded] / Donacia liebecki Schaeffer det. IS Askevold 1985.” D. pallipes was listed in early catalogues as a synonym of D. aequalis Say; Schaeffer (1925) realized that D. pallipes Lac. was a
senior synonym of *D. liebecki*, but preoccupied, thus *D. liebecki* remains valid. Synonymy with *D. liebecki* by Schaeffer (1925).

*D. limonia* Schaeffer (1925). This name was described as a variety of *D. biimpressa* Melsh.; Marx (1957) reduced it to synonymy with *D. biimpressa*. I here remove it from synonymy, and recognize *D. limonia* as a valid species on the basis of distinctive structure of male genitalia; further treatment of this species as a member of the *D. distincta*-Group is planned. **NEW STATUS**


*D. magnifica* LeConte (1851:310). LeConte did not state the number of specimens before him, but stated he had both male and female specimens. Four specimens in the Leconte collection bear appropriate label data, and are here designated, lectotype σ, MCZ #4237, one σ and two φ paralectotypes, MCZ #4237: “LECTOTYPE [blue trimmed disc] / σ [pale blue disc] / Type 4237 [red] / Donacia magnifica Lec. / LECTOTYPE σ Donacia magnifica LeConte 1851 designated I.S. Askevold 1984 [red]”; the three paralectotypes are labelled “magnifica 2”, “magnifica 3” and “magnifica 4”, each with the labels “Type 4237” [red] and “PARALECTOTYPE Donacia magnifica LeConte [red]”. In earlier catalogues, *D. magnifica* was listed under *D. cincticornis*.

*D. megacornis* Blatchley (1910:1103). Lectotype σ, PUR. Blatchley did not state the number of specimens before him, but designated a lectotype σ later (Blathley 1930): “Lake Co., Ind. W.S.B. 5-28-1903 / Donacia megacornis, sp. nov. [handwritten]”.

*Donacia megatocera* [sic] Weise (1913:118). Unnecessary replacement name. Clavareau (1913:23) altered the spelling of *megatocera* to *megalocera*, probably supposing that it was a printer's error. Weise proposed the name *D. megalocera* to
replace Blatchley’s *D. megacornis*, on the basis that *megacornis* is a name formed from two languages; the name *megacornis* is valid, and Schaeffer (1925) restored use of the name *D. megacornis*, and synonymized *D. megatocera*.


*D. pubescens* LeConte (1868:55). Described from a unique specimen, which LeConte stated was from the Smoky Hill River. Holotype ♂, MCZ #4234: “Type [red] / D. pubescens Lec.”.


*D. subtilis* Kunze (1818:12) (replacement name for *D. aenea* Ahrens).


*Donacia quadricollis* Say (1827:282). Neotype ♂, MCZ #32951, designated by Askevold (1987a:633). The name *D. quadri- collis* was formerly used by authors (e.g. Schaeffer 1925, Wilcox 1954, Marx 1957), applied to the species now known as *D. cuprea* Kirby (see above) but was synonymized with *D. subtilis* by Askevold (1987a).


Donacia tuberculata Lacordaire (1845:155). Lectotype ♂ and paralectotype ♀, BMNH. Two specimens were found that appeared to be authentic Lacordaire specimens, which are here designated: "LECTOTYPE [blue trimmed disc] / D. tuberculata Lac 67.56 / LECTOTYPE ♂ Donacia tuberculata Lacordaire 1845 designated 10.vii.1984 I.S. Askevold [red]". A female is labelled: "PARALELECTOTYPE ♀ [pale blue-trimmed disc] / TYPE [red trimmed disc] / TYPE [white] / E. Coll. Laferté / Donacia tuberculata mihi h. in Ameri. bor. D. Leconte [green, folded] / 67.56 / PARALEC-

TOTYPE ♀ Donacia tuberculata Lacordaire 1845 designated 10.vii.1984 I.S. Askevold [red]." Donacia tuberculata was synonymized with D. rufa Say by Schaeffer (1925), an arrangement followed by Marx (1957). Leng (1891) had used D. rufa in the sense used above, as a species of Plateumaris to which it was transferred by Askevold (1991). With transfer of D. rufa to Plateumaris, D. tuberculata becomes the senior, available name for the taxon previously recognized as D. rufa, sensu Schaeffer (1925) and Marx (1957).

NEW STATUS

Donacia rutila Melsheimer (1847:160). Lectotype ♀, MCZ #32952, by present designation: "LECTOTYPE [blue trimmed disc] / Melsh. rutila / M.C.Z. Lectotype 32952 [red] / tuberculata [large handwritten Melsh. label] / LECTOTYPE ♀ Donacia rutila Melsheimer, design. I.S. Askevold 1990 [red]". Earlier authors (e.g. Leng 1891) placed D. rutila under D. tuberculata. However, this name was transferred to synonymy of D. rufa. Because D. tuberculata is revalidated, D. rutila becomes its synonym. NEW SYNONYM

D. tuberculifrons Schaeffer (1919:315). Holotype ♂, USNM: "Toronto VII.7 Can. / Brooklyn Museum Coll. 1929 / TYPE USNM 42389 / D. tuberculifrons type Schffr.". Allotype ♀ and one paratype, USNM (label details not recorded). Four paratypes, MCZ #27229 (1 ex Fall Colln.): "Toronto, Can. VII.1". This species was treated as a member of the D. subtilis-Group by Askevold (1987a).

D. vicina Lacordaire (1845:154) (not Haupt, 1956). Holotype ♀, BMNH. Lacordaire described the species from a single
specimen received from Reiche, incorrectly stating it to be male: “HOLOTYPE [red trimmed disc] / TYPE [white] / E. Coll. Laferté / Donacia vicina Dej. h. in Amer. bor. D. Leconte [green]”.

**Donacia (Donacia) Fabricius, 1775.** All Nearctic species of *Donacia* were formerly placed in *Donacia s. str.* (e.g. Leng 1891, Jacoby and Clavareau 1904, Clavareau 1913, Jolivet 1970, Borowiec 1984), but Askevold (1990) restricted the nominate subgenus to include 10 Nearctic species.


**Donacia pulchella** LeConte (1851:312). LeConte apparently described a single specimen, stating at least that he had no males. The single specimen found in the LeConte collection is therefore assumed to be the holotype, which LeConte incorrectly sexed. Holotype φ, MCZ #4235: “pink disc / Type 4235 [red] / D. pulchella LeC.". Synonymy with D. lucida by Crotch (1873), therefore placed as synonym of D. cincticornis by later authors.

**Donacia antillarum** Suffrian (1864:282). Suffrian described this from at least two specimens, because he gave a range of size. A single specimen here designated as lectotype was found in MLU, associated with the Suffrian label: “Antillarum m. Cuba [large, green, black-bordered label]”. LECTOTYPE (sex undetermined, abdomen missing): “25004. [red handwriting on small label] / LECTOTYPE Donacia antillarum Suffrian 1864 design. I.S. Askevold 1991”. Treated as a subspecies of D. cincticornis by Schaeffer (1925); synonymy with D. cincticornis by Marx (1957).


**D. edentata** Schaeffer (1919:313). Holotype σ, USNM: “Crum Lk. N.Y. / U.S.N.M. Type No. 42383 / D. edentata type Schffr.”. Allotype φ and five paratypes, USNM (label data not
recorded). One paratype CAS, and eight paratypes, MCZ, “Centerton N.J., 5.31”.

_D. hypoleuca_ Lacordaire, 1845:101. Lectotype σ, BMNH, by present designation. Lacordaire described this species from two, supposedly φ, specimens; however, there is only a single σ specimen under _hypoleuca_ which bears an original Lacordaire label: “Lectotype σ [blue trim disc added by me] / E. Coll. Laferté / 67.56 / LECTOTYPE σ Donacia hypoleuca Lacordaire 1845 designated 11.VII.1984 I.S. Askevold [red, added by me]”. Also in the BMNH is another specimen (σ) which bears a type label; it bears the labels “TYPE [white] / This specimen cannot possibly be the type of hypoleuca Lac. The labels have evidently been misplaced. C.G. / Donacia hypoleuca. Van Wintheim h. in Amer. bor. Neu Orleans D. v. Wintheim [green Lacordaire label]”. This latter label is evidently genuine, according to information given by Lacordaire, mentioning van Wintheim specifically (1845:101); however, the specimen does not agree with the description at all, and is in fact a specimen of _D. palmata_ Olivier. Whether the specimen is a syntype or not is irrelevant, for the other specimen is here designated lectotype in the interest of conserving the traditional use of _D. hypoleuca_.


_Donacia floridiae_ Leng (1891:166). No type specimen specifically identified was found in USNM (R.E. White, pers. comm.); however, a specimen, USNM type #558 was found among specimens in “regular collection”, which is assumed
to be a paratype. Synonymized by Schaeffer (1925), which is doubtless correct.

**D. palmata** Olivier (1795:8). Type(s) almost certainly destroyed; no neotype is designated because Olivier provided a figure of the protarsus of male specimens; the species is unique among Donaciinae in this structure.

**Donacia claudicans** Germar (1821:173). Germar evidently described this from a single male specimen, specifically discussing the unusual and unmistakable protarsal structure. According to Suffrian (1872), he had the Germar collection in his possession (see extended discussion of *P. nitida* by Askevold, 1991). Thus, Germar’s type, if existing, should be in the Suffrian collection. Three specimens (♂♂) are associated with the large, green, black-bordered Suffrian label in MLU: “palmata Oliv. Lec. claudicans Grm. Illinois”. Neither of these fits especially the specific colours that Germar described, and so it is quite likely that none of these is the Germar specimen. However, it is not necessary to designate a neotype because the species is so distinctive and Germar described the distinguishing character. I have not traced the source of original synonymization.

**Donacia palmata angustipes** Marx (1957:237). Holotype ♂ and allotype ♀ #8452, and 19 paratypes, CAS, “Devils Riv. near Del Rio, Texas, vi-16-32, J.O. Martin”; 2 paratypes, CAS, “Devils Riv. near Del Rio, Texas, v-25-32, J.O. Martin”. These Texas specimens differ little from other, typical *D. palmata* from other regions, differing essentially only in that males have a less broadly palmate basal protarsomere.

**NEW SYNONYMY**


**D. piscatrix** Lacordaire (1845:113). Lectotype ♂, BMNH, by present designation. Lacordaire did not state the number of specimens before him, only that he had no male specimens. One ♀ specimen was found: “LECTOTYPE [blue trimmed disc] / TYPE [red] / Donacia piscatrix Lacord. / E. Coll. Laferté / D.


*Donacia congener* LeConte (1851:310). LeConte did not state number of specimens before him, only that he had no males. Two specimens in the LeConte collection bear orange discs, so it appears he had at least two specimens, and I here designate them. Lectotype ♂, MCZ #4238: “LECTOTYPE [blue trimmed disc] / ♂ [orange disc] / Type 4238 [red] / D. congener LeC. / LECTOTYPE ♂ Donacia congener LeConte 1851 designated I.S. Askevold 1984”; and one ♂ paralectotype, MCZ #4238 “♀
Donacia episcopalis Lacordaire (1845:105). Lectotype ♂, BMNH, designated by Askevold (1987b:348). Formerly placed in synonymy with D. proxima, transferred to synonymy with D. caerulea by Schaeffer (1925), who used this name used incorrectly; D. episcopalis was transferred back to junior synonymy with D. proxima by Askevold (1987b).


Donacia caerulea, sensu Schaeffer (1925) and Marx (1957). See Askevold (1987b) for discussion.


D. texana Crotch (1873:22). Lectotype ♂, MCZ #5032, by present designation. Crotch did not state the number of specimens before him, but three specimens already indicated as types were found in the MCZ. Lectotype ♂, MCZ #5032, "Tex. / Type 5032 [red] / D. texana Cr. / LECTOTYPE ♂ Donacia texana Crotch design. IS Askevold 1990 [red]"; paralectotype ♂, MCZ #5032, "Tex. / Type 5032 [red] / texana 2 / PARALECTOTYPE Donacia texana Crotch [red]" and paralectotype ♂, MCZ #5032, "Tex. / Type 5032 [red] / texana 3 / PARALECTOTYPE Donacia texana Crotch [red]".

Psyche

$D. \text{ minor}$ as a subspecies and therefore synonymized $D. \text{ minor}$, to which I agree.

**HAEMONIINI CHEN, 1941**

*Neohaemonia* Székessy (1941:148). This genus was formerly considered congeneric with the Palaearctic genus, *Macroplea* Samouelle. Revision of genus and establishment of genus status by Askevold (1988).

*N. flagellata* Askevold (1988:390). Holotype $\sigma$, CNC, and 72 paratypes of various locality data deposited in CARR, CAS, CNC, CUIC, EGRC, ISAC, JBWM, ROM, UAE, UMMA, USNM.


*N. melsheimeri* (Lacordaire, 1845:211). Holotype $\sigma$, BMNH. Details given by Askevold (1988).

*N. minnesotensis* Askevold (1988:388). Holotype $\sigma$, CNC #19495, and 38 paratypes with various locality data deposited in AMNH, CAS, CMP, CNC, DEFW, EGRC, FMNH, FSCA, ISAC, JBWM, LSUC, MCZ, NMDC, SCSU, UMMA, USNM.

*N. nigricornis* (Kirby, 1837:222). Holotype $\varphi$, BMNH. Details given by Askevold (1988).


**ACKNOWLEDGEMENTS**

I owe the many curators of museums cited above profuse thanks for their inestimable help with my studies about Donaciinae. Without their assistance, this and other publications on this group would suffer significant incompleteness. Mostly I examined all types myself, but Richard E. White is owed particular thanks for providing details of Schaeffer and Leng types that I was neglectful in recording data about personally, or did not personally examine.

Research over a number of years, and costs of publication, were supported by NSERC grant A0428 held by R.E. Roughley, University of Manitoba, and in part also by an NSERC PGS Scholarship, an Ernst Mayr Grant in aid of research at MCZ, and funds provided by CAS to
research at that institution. Some costs were supported by a grant from CSRS, USDA to Florida A. & M. University.

**Summary**

The Nearctic species of Donaciinae are catalogued according to the most recent classification of its members at tribal, generic and subgeneric levels. Annotations are provided where significant departures have been made from their preceding classification. *Donacia tuberculata* Lacordaire is removed from synonymy with *D. rufa* Say (now placed in *Plateumaris*). *Donacia limonia* Schaeffer is removed from synonymy with *D. biimpressa* Melsheimer. *Donacia angustipes* Marx is reduced to synonymy of *D. palmata* Olivier; *D. rutila* Melsheimer is synonymized with *D. tuberculata* Lacordaire. Details of label data, number, kind and location of preservation of type specimens (if existing) of all described taxa are given. Lectotypes (and paralectotypes, if any) are designated for the following nominal taxa: *D. alutacea* LeConte, *D. biimpressa* Melsheimer, *D. carolina* Lacordaire, *D. cincticornis* Newman, *D. congener* LeConte, *D. cuprea* Melsheimer, *D. distincta* LeConte, *D. hypoleuca* Lacordaire, *D. lucida* Lacordaire, *D. magnifica* LeConte, *D. militaris* Lacordaire, *D. piscatrix* Lacordaire, *D. rufescens* Lacordaire, *D. rufipennis* Lacordaire, *D. rutila* Melsheimer, *D. texana* Crotch, *D. torosa* LeConte and *D. tuberculata* Lacordaire. Types of *D. palmata* Olivier and *D. claudicans* Germar are believed lost, but are distinctive taxa whose identity is not in doubt.

**References Cited**

**Arens, A.**


**Askevold, I.S.**


Becker, E.C.


Blatchley, W.S.


Borowiec, L.


Brivio, C. and E.U. Balsbaugh, Jr.


Chen, S.H.


Clark, H.


Clavareau, H.


Couper, W.


Crotch, G.R.


Fabricius, J.C.


Prison, T.H.


Germain, E.F.


GISTEL, J.N.F.X.

GOECKE, H.

GUÉRIN-MENÉVILLE, F.E.

HATCH, M.H.

HAUPT, H.

HOPPE, D.H.
1795. Enumeration Insectorum elytratorum circa Erlangam indigenarum secundum systema Fabricianum observationibus iconibusque illustrata. Erlangae, Palm 1795. iv + 70 pp + 1 pl.

JACOBY, M.

JACOBY, M. AND H. CLAVAREAU

JOLIVET, P.

KIRBY, W.
1837. Part the fourth and last. The Insects In Richardson, J. Fauna Boreali-Americana; or the Zoology of the Northern Parts of British America: containing descriptions of the objects of natural history collected on the late northern land expedition under command of Cpt. Sir John Franklin, R.N. Norwich. xxxix + 325 pp, + 8 plates.

KNAB, F.

Askevold 189
Kunze, G.

Lacordaire, Th.

LeConte, J.L.

Leng, C.W.

Mannerheim, C.G.

Marx, E.J.F

Mead, A.R.
1938. New subspecies and notes on Donacia with key to the species of the Pacific States. The Pan-Pacific Entomologist 14: 113–120.

Medvedev, L.N.

Melsheimer, F.E.

Newman, E.
OLIVIER, A.G.  

REITTER, E.  

SAY, T.  
1824. Descriptions of Coleopterous insects collected in the late Expedition to the Rocky Mountains, performed by order of Mr. Calhoun, Secretary of War, under the command of Major Long. Journal of the Academy of Natural Sciences of Philadelphia 3: 403–462.


SCHAEFFER, C.  


SCHRANK, F. VON PAULA  

SOLSKY, S.  

SUFFRIAN, C.W.L.E.  


SZKEESSY, V.  

THOMSON, C.G.  

WEISE, J.  

WILCOX, J.A.  
 INDEX TO SPECIES, GENUS AND FAMILY GROUP NAMES

<table>
<thead>
<tr>
<th>Genus/Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>aenea, 178</td>
<td>flagellata, 186</td>
</tr>
<tr>
<td>aerea, 178</td>
<td>flavipennis, 169</td>
</tr>
<tr>
<td>aequalis, 174, 176</td>
<td>flavipes, 169, 171</td>
</tr>
<tr>
<td>affinis, 171</td>
<td>flohri, 186</td>
</tr>
<tr>
<td>alutacea, 184</td>
<td>floridae, 182</td>
</tr>
<tr>
<td>americana, 186</td>
<td>frosti, 169</td>
</tr>
<tr>
<td>angustipes, 183</td>
<td>fulgens, 175, 178</td>
</tr>
<tr>
<td>antillarum, 181</td>
<td>fulvipes, 169</td>
</tr>
<tr>
<td>assimilis, 173</td>
<td>gentilis, 169</td>
</tr>
<tr>
<td>auriscalpula, 173</td>
<td>germani, 169</td>
</tr>
<tr>
<td>auriferata, 168</td>
<td>glabrata, 173</td>
</tr>
<tr>
<td>balli, 168</td>
<td>harrisii, 172</td>
</tr>
<tr>
<td>bimpressa, 173, 177</td>
<td>hirticollis, 175</td>
</tr>
<tr>
<td>binodosa, 170</td>
<td>hypoleuca, 182</td>
</tr>
<tr>
<td>caerulea, 174, 185</td>
<td>idola, 169</td>
</tr>
<tr>
<td>carolina, 184</td>
<td>indica, 169</td>
</tr>
<tr>
<td>cataractae, 169, 170</td>
<td>jucunda, 171</td>
</tr>
<tr>
<td>cazieri, 174</td>
<td>kirbyi, 171</td>
</tr>
<tr>
<td>chalcea, 171</td>
<td>liebecki, 176</td>
</tr>
<tr>
<td>cincticornis, 170, 177, 180, 181</td>
<td>limonia, 177</td>
</tr>
<tr>
<td>claudicans, 183</td>
<td>lodingi, 171</td>
</tr>
<tr>
<td>confluenta, 174</td>
<td>longicollis, 170</td>
</tr>
<tr>
<td>confusa, 174</td>
<td>lucida, 180, 181</td>
</tr>
<tr>
<td>congenu, 184</td>
<td>Macrolea, 186</td>
</tr>
<tr>
<td>cuprea, 175, 184</td>
<td>magistiga, 178</td>
</tr>
<tr>
<td>curticollis, 175</td>
<td>magnifica, 177</td>
</tr>
<tr>
<td>dissimilis, 175</td>
<td>megagornis, 177</td>
</tr>
<tr>
<td>distincta, 175</td>
<td>megalocera, 177</td>
</tr>
<tr>
<td>diversa, 168</td>
<td>megatocera, 177</td>
</tr>
<tr>
<td>dives, 169</td>
<td>melsheimeri, 186</td>
</tr>
<tr>
<td>Donacia (Donacia), 180</td>
<td>metallica, 169</td>
</tr>
<tr>
<td>Donacia (Donaciomima), 173</td>
<td>militaris, 182</td>
</tr>
<tr>
<td>Donaciella, 172</td>
<td>minnesotensis, 186</td>
</tr>
<tr>
<td>Donaciini, 172</td>
<td>minor, 185, 186</td>
</tr>
<tr>
<td>dubia, 168, 169</td>
<td>nana, 169</td>
</tr>
<tr>
<td>edentata, 181</td>
<td>Neohaemona, 186</td>
</tr>
<tr>
<td>emarginata, 169, 170</td>
<td>neomexicana, 170</td>
</tr>
<tr>
<td>episcopalisis, 185</td>
<td>nigricornis, 186</td>
</tr>
<tr>
<td>femoralis, 169</td>
<td>nitida, 170, 171</td>
</tr>
<tr>
<td></td>
<td>notmani, 170</td>
</tr>
<tr>
<td></td>
<td>occidentalis, 175</td>
</tr>
<tr>
<td></td>
<td>pacifica, 170</td>
</tr>
<tr>
<td></td>
<td>pallipes, 176</td>
</tr>
<tr>
<td></td>
<td>palnata, 182, 183</td>
</tr>
<tr>
<td></td>
<td>parva, 169</td>
</tr>
<tr>
<td></td>
<td>parvidens, 183</td>
</tr>
<tr>
<td></td>
<td>piscatrix, 183, 184</td>
</tr>
<tr>
<td></td>
<td>Plateumarini, 168</td>
</tr>
<tr>
<td></td>
<td>Plateumaris, 168</td>
</tr>
<tr>
<td></td>
<td>Poecilocera, 172</td>
</tr>
<tr>
<td></td>
<td>porosicollis, 178</td>
</tr>
<tr>
<td></td>
<td>proxima, 174, 185</td>
</tr>
<tr>
<td></td>
<td>pubescens, 178</td>
</tr>
<tr>
<td></td>
<td>publicollis, 172</td>
</tr>
<tr>
<td></td>
<td>pulchella, 181</td>
</tr>
<tr>
<td></td>
<td>pusilla, 170, 171</td>
</tr>
<tr>
<td></td>
<td>pyritosa, 171</td>
</tr>
<tr>
<td></td>
<td>quadricollis, 175, 178</td>
</tr>
<tr>
<td></td>
<td>robusta, 171</td>
</tr>
<tr>
<td></td>
<td>rudicollis, 176</td>
</tr>
<tr>
<td></td>
<td>rufa, 170, 171, 179</td>
</tr>
<tr>
<td></td>
<td>rufescens, 185</td>
</tr>
<tr>
<td></td>
<td>rufipennis, 180</td>
</tr>
<tr>
<td></td>
<td>rugifrons, 170</td>
</tr>
<tr>
<td></td>
<td>rugosa, 178</td>
</tr>
<tr>
<td></td>
<td>rutila, 179</td>
</tr>
<tr>
<td></td>
<td>serricauda, 169</td>
</tr>
<tr>
<td></td>
<td>schaefleri, 170, 171</td>
</tr>
<tr>
<td></td>
<td>shoemakeri, 169, 171</td>
</tr>
<tr>
<td></td>
<td>Sominella, 172</td>
</tr>
<tr>
<td></td>
<td>subtilis, 174, 175, 178</td>
</tr>
<tr>
<td></td>
<td>sulcicollis, 171</td>
</tr>
<tr>
<td></td>
<td>tenuis, 181</td>
</tr>
<tr>
<td></td>
<td>texana, 185</td>
</tr>
<tr>
<td></td>
<td>torosa, 174</td>
</tr>
<tr>
<td></td>
<td>tryphera, 181</td>
</tr>
<tr>
<td></td>
<td>tuberculata, 171, 179</td>
</tr>
<tr>
<td></td>
<td>tuberculifrons, 179</td>
</tr>
<tr>
<td></td>
<td>vermiculata, 170</td>
</tr>
<tr>
<td></td>
<td>vicina, 179</td>
</tr>
<tr>
<td></td>
<td>wallisi, 169</td>
</tr>
</tbody>
</table>