A Review of the Scaritinid Beetles (Coleoptera: Carabidae: Scaritini) of Nebraska

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A REVIEW OF THE SCARITINID BEETLES (COLEOPTERA: CARABIDAE: SCARITINI) OF NEBRASKA

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The tribe SCARITINI includes 18 Nebraska species in five genera. Keys are provided for the genera and the species. Descriptions and distributions are delineated. Illustrations clarify key characters for all genera and 12 species. Faunal distribution maps are provided for the six most widespread species.

† † †

INTRODUCTION

This paper provides descriptions, keys, and distributional records for the adult SCARITINI of Nebraska. This work was based on specimens in the Division of Entomology of the University of Nebraska State Museum, Lincoln, Nebraska.

The Tribe SCARITINI contains 84 genera and 1,259 described species (Csiki, 1927). The tribe is world-wide in distribution, but, only 16 genera and 242 species are known in North and Central America (Blackwelder and Arnett, 1977; Nichols, 1986; Bousquet, 1988). Currently, five genera and 20 species comprise the Nebraska SCARITINI. The genera Pasimachus and Schizogenus are confined to the Americas, reaching peak diversity in the southern United States. Dyschirius and Clivina are distributed throughout the Northern Hemisphere; however, only two Holarctic species, Dyschirius politus and Dyschirius nigricornis, are known. That genus is most abundant in northern temperate regions, being ecologically replaced by Clivina in the tropics. The genus Scarites is circumpolar (Lindroth, 1961, 1985; Csiki, 1927).

Putzeys (1846, 1866) and LeConte (1857, 1879) examined many of the species of SCARITINI, and LeConte provided limited keys to several genera. Lindroth (1961) treated the group as a tribe of the subfamily Carabinae, including 18 of the 20 Nebraska species. Bousquet (1988) provided keys to the North American species of Dyschirius.

The Tribe SCARITINI is characterized by a pedunculate body. The anterior portion of the mesothorax is constricted to form a peduncle behind the prothorax. The scutellum is located on the peduncle. Lindroth (1961) noted that the peduncle grants mobility to the prothorax by separating its posterior edge from the elytra. The SCARITINI are characterized by having strong, forward-projecting mandibles. The protibiae are dilated and flattened as an adaptation for digging. There is little external sexual dimorphism.

The natural history of this group is largely unknown, but the adults tend to be found near water, burrowing in soil with little or no vegetation. The adults and larvae of the genus Dyschirius are predaceous and are often associated with the staphylinid beetles upon which they prey. Most of the SCARITINI have fully developed wings and can be

**Tribe SCARITINI**

**Key to Adults of Nebraska Genera**

1. Lateral margin of pronotum with 2 prominent setae (Figs. 6, 9, 10, 12, 13) ........................................ 2

1'. Lateral margin of pronotum with 1 prominent seta (Figs. 1, 2) ........................................ 3

2. Pronotal disk with sharp, denticulate angles formed by lateral and basal margins (Fig. 2). .......... *Pasimachus*

2'. Outline of pronotal disk smooth, without denticulate angles formed by lateral and basal margins (Fig. 1) ........................................ *Scartites*

3. Pronotal disk with two deeply impressed longitudinal fissures at base on both sides of median line; frons with 3 or more pairs of parallel carinae surrounding a shiny central field (Fig. 13) ........................................ *Schizogenus*

3'. Not as above ........................................ 4

4. Pronotal disk oval, hemispherical in cross-section (Fig. 6); row of setigerous punctures along lateral margin of each elytron broadly interrupted, leaving 1–3 sub-humeral foveae, each with a single seta .............. *Dyschirus*

4'. Pronotal disk oblong to subquadrate, not hemispherical in cross-section (Figs. 9, 12); row of setigerous punctures along lateral margin of each elytron continuous, sub-humeral foveae absent ........................................ *Clivina*

**Genus Pasimachus** Bohelli

*Pasimachus* Bonelli, 1813: 476; *Emydopterus* Lacordaire, 1854: 190; *Molobrus* Putzeys, 1846: 521.

Nebraska species are black with enlarged mandibles and the protibia are dilated as an adaptation for digging. They share the following characters: **HEAD**: Frons with paired, effaced, parallel grooves from middle of each eye to the apex of labrum. Antennae 11–segmented; scape as long as next 2 segments, with a single setigerous puncture; pedicel glabrous; flagellum pubescent, setae light yellowish brown to gold. **PRONOTUM**: Lateral margins completely beaded; each margin with a single brown seta at denticulate angle of lateral and basal margins. Basal margin deeply cleft. Pronotal field with median Y-shaped sulcus, opening anterior. **ELYTRA**: Humeral carina long, sharp. Lateral margins complete, beaded, with a single, uninterrupted row of setigerous punctures from humerus to apex; setae yellowish brown to pale yellow. **LEGS**: Profemur dilated, rounded. Protibia with enlarged terminal spur; subapical spur reduced with curved basal spine; median edge with pubescent groove modified as an antennal cleaner; setae light brown.

**Genus Pasimachus**: **Key to Adults of Nebraska Species**

1. Lateral margins of pronotum and elytra metallic violet, elytra without striae ........ *P. elongatus*

1'. Lateral margins of pronotum and elytra colored as body, each elytron with 8 striae (Fig. 2) .................... *P. obsoletus*

**Pasimachus elongatus** LeConte

*Pasimachus elongatus* LeConte, 1848a: 147; *P. angustulus* Casey, 1913: 84; *P. evanescens* Casey, 1913: 84; *P. pimalis* Casey, 1913: 84; *P. vegasensis* Casey, 1913: 85; *P. vernicatus* Casey, 1913: 85

**Description**: Body length: 25–26 mm. **HEAD**: Black. Surface smooth. Labrum exposed, rectangular, with 4 setigerous punctures; setae brown to yellow brown; apex subtruncate with ventral tooth. Mandibles large; cutting edge asymmetrically toothed, left with 2 teeth, right with 1 tooth; each mandible with 2 longitudinal rows of ventral setae; setae light reddish brown to yellow brown; mandible ventrally rugose, dorsally rugose in basal 2/3. **PRONOTUM**: Color as head except margin metallic blue-violet to blue. Surface smooth. **ELYTRA**: Color as head except margin metallic blue-violet to blue. Surface smooth. **LEGS**: Protibia with 3 lateral teeth, basal tooth rudimentary; dorsum with median groove, single row of setigerous punctures present along midline; setae stout, reddish brown to dark brown.

**Distribution**: Restricted to North America, but widely distributed from Alberta, Saskatchewan, Manitoba and South Dakota south to Texas, Arizona and Mexico (Csiki, 1927; Lindroth, 1961; Blackwelder and Arnett et al., 1977).

**Locality Records** (Fig. 14): **ANTELOPE COUNTY**: Brunswick (1 collection), Burnett (1); **ARTHUR**: Arapahoe Prairie (7); **BANNER**: Bull Canyon (2), Harrisburg (4); **CHASE**: Imperial (1); **CHERRY**: Hackberry Lake (1), Sparks (4), Valentine (1), Valentine Wildlife Refuge (1), No Data (1); **CHEYENNE**: Sidney (1); **CLAY**: Edgar (1); **CUMING**: West Point (1); **DODGE**: Milburn (1); **DAWES**: Fort Robinson (2), Pine Ridge (1), Whitney (3), Crawford (2); **DIXON**: Maskell (1); **DUNDEE**: Haigler (4); **FILLMORE**: Fairmont (4); **FRANKLIN**: Bloomington (1); **GARDEN**: Lewellen (1); **GRANT**: Whitman (2); **HALL**: Grand Island (8); **HOLT**: Spencer Dam (1); **KEITH**: Cedar Point Biological Station (6); **LANCASTER**: Hickman (1), Lincoln (22); **McPHERSON**:
DESCRIPTION: (Fig. 2) Body length: 18–20 mm. HEAD: Black. Anterior limit of each longitudinal frontal groove ending in a rugose field. Labrum exposed, rugose, subrectangular, with 1 lateral lobe on each side; apex subtruncate with no subapical tooth. Mandibles large, smooth; cutting edges asymmetrically toothed, left with 3 teeth, distal tooth nearly obliterated, right with 2 teeth; left mandible with rugose patch on dorsal of central tooth, both mandibles with rugose patch on apex ventrally. PRONOTUM: Color as head. Surface smooth.ELYTRA: Color as head. Surface smooth. Each elytron with 6 small striae, striae extending from humerus to apex; intervals punctate, often obliterated. LEGS: Color black. Surface smooth. Protibia with 3 lateral teeth, basal tooth rudimentary; dorsal with 2 short, longitudinal, median grooves; distal groove with 4 setigerous punctures, setae stout, reddish brown; proximal pit with 3 setigerous punctures, setae stout, reddish brown.

Distribution: Western United States, primarily between the Rocky Mountains and the Mississippi River from South Dakota south through Colorado and Kansas to Texas, New Mexico and Arizona (Csiki, 1927; Blackwelder and Arnett et al., 1977).

Locality Records (Fig. 14): ARTHUR COUNTY.: Crex Meadows (28 collections); CHASE: Imperial (1); CHERRY: Dewey Lake Township (5), Hills (1), Sparks (1), Valentine (1); CUSTER: Milburn (1); DUNDY: Haigler (1); KEITH: Ogallala (1); SHERIDAN: Gordon (4); SIOUX: Agate (2); THOMAS: Dismal River (7), Halsey (22), Halsey National Forest (2).

Temporal Distribution: April (1 collection), May (12), June (7), July (15), August (15), September (1).
Figures 1–7: 1. *Scarites subterraneus* Fabricius 1775. 2. *Pasimachus obsoletus* LeConte 1848. 3. *Dyschirius sphaericollis* Say 1825; a, dorsal head; b, dorsal protibia; c, external lateral protibia. 4. *Dyschirius haemorrhoidalis* (Dejean 1831); a, clypeal field; b, dorsal protibia; c, external lateral protibia. *Dyschirius truncatus* LeConte 1857; d, clypeal field; e, dorsal protibia; f, external lateral protibia. 5. *Dyschirius integer* LeConte 1851; a, dorsal head; b, dorsal protibia; c, external lateral protibia. 6. *Dyschirius erythrocerus* LeConte 1857. 7. *Dyschirius erythrocerus* LeConte 1857; a, dorsal head; b, dorsal protibia; c, external lateral protibia.
Remarks: Atteabas fossor (Linnaeus) sensu DeGeer (1774:350) was long considered a junior synonym of the North American Scarites subterraneus Fabricius (1775:249) (Illiger, 1802). Nichols (1985a) examined and identified the DeGeer specimen as Scarites orientalis Bonelli (1813: 469). Nichols (1985b) states that the type of Scarites subterraneus Fabricius 1775 (described from "America") deposited in the Zoological Museum at Copenhagen, Denmark, is not conspecific with Scarites abbreviatus Dejean (1825:379). In order to guarantee the taxonomic stability of Scarites subterraneus Fabricius 1775, Nichols (1985b) proposed a neotype specimen described from Pt. Pelee, Ontario, Canada.

Distribution: The Scarites complex is world-wide in distribution. Scarites subterraneus Fabricius 1775, as defined by Nichols (1986), is limited to North America from Canada south to Texas. It is uncommon in the northwestern United States. Prior to the Nichols' designation, Scarites subterraneus Fabricius 1775 was described throughout North America, Mexico, and Cuba, but the Mexican and Cuban descriptions may represent Scarites marinus Nichols (1986: 258).

Locality Records (Fig. 14): BUFFALO COUNTY.: Gibbon (1 collection); CASS: Louisville (1), Southbend (3); CUMING: West Point (1); CUSTER: Milburn (1); DIXON: Maskell (1); DOUGLAS: Omaha (1); FILLMORE: Fairmont (13); FRANKLIN: No Data (1); FURNAS: Oxford (1); HOLT: No Data (2); LANCASTER: Hickman (1), Lincoln (97), Roca (2), Waverly (1); NEMAHA: Peru (1); SALINE: Wilbur (2); SARPY: Bellevue (1); SAUNDERS: Cedar Bluffs (1); SCOTTS BLUFF: Mitchell (1).

Temporal Distribution: March (2 collections), April (8), May (59), June (34), July (17), August (2), September (3), October (2), November (1).

Genus Schizogenus Putzeys

Schizogenus Putzeys, 1846: 649; Genioschizus Whitehead, 1972: 144

Beetles of the genus Schizogenus share the following characters: HEAD: Frons with three pairs of parallel ridges, the median most widely separated and prolonged on the clypeus. Anterior margin of clypeus with three teeth. PRONOTUM: Pronotal field with paired, effaced, J-shaped, sulci either side of median, opening anteriolaterally. LEGS: Protibiae palmate, dilated with lateral teeth.

Schizogenus ferrugineus Putzeys

Schizogenus ferrugineus Putzeys, 1864: 649; S. sulcatus LeConte, 1848b: 214

Description: (Fig. 13) Body length: 3-3.5 mm. HEAD: reddish brown to orange brown. Surface lightly granulated to smooth. Frons with 6 parallel, longitudinal carina, median pair prolonged onto clypeus. Each median margin of eye with 2 setigerous punctures; setae yellow. Clypeus bilobed; apical margin and lateral lobes bisinuate; apical margin with 3 teeth. Labrum rectangular; apex emarginate, bisinuate. Mandibles large, each mandible with strong, black, lateral carina. Antennae 11 segmented, color light reddish brown to light yellowish brown; scape as long as the next 2 segments, with 1 setigerous puncture; pedicel glabrous; flagellum pubescent, setae light yellowish brown to golden.

PROTHORAX: Color as head, surface smooth. A single setigerous puncture at each angle of the lateral and basal margins, margins completely beaded; basal margin twice as thick as lateral margins. Pronotal field with median Y-shaped sulcus, opening anterior; paired, effaced, J-shaped, sulci either side of median sulcus, parallel to stem of the Y-shaped sulcus, opening anteriolaterally. ELYTRA: Color as head. Margins completely beaded; with single row of setigerous punctures along and above margin from humerus to apex, setae light brown to yellowish white. Each elytron with 7 striae, striae extending from humerus to apex, with obsolete punctures; interval 3 with 6-8 apical, setigerous punctures, intervals 5,7 with 3-6 similar punctures, setae yellowish white. LEGS: Color as head, surface smooth. Profemur dilated. Protibia with 2 large lateral teeth; terminal spur enlarged; subapical spur enlarged, with curved basal spine; median edge with pubescent groove modified as antennal cleaner, setae light yellow to golden.

Distribution: Eastern North America from southern Ontario and South Dakota south to Texas, Florida and Arizona (Caiki, 1927; Lindroth, 1961; Blackwelder & Arnett et al., 1977).

Locality Records: CUMING COUNTY.: West Point (1 collection).

Temporal Distribution: June (1).

Genus Dyschirius Bonelli

Dyschirius Bonelli, 1813: 483; Akephorus LeConte, 1851: 194; Dyschiridius Jeannel, 1941: 264

The Nebraska species of Dyschirius share the following characters: HEAD: Frontolongitudinal suture extends from base of each eye to frontoclypeal suture. Frons with median carina between each frontolongitudinal suture and eye margin, with 2 median setigerous punctures, setae light brown to dark reddish brown. Mandibles large, surface smooth, with external, longitudinal, black carina, no internal teeth. Antennae 11-segmented, color as head; scape length variable by species; pedicle setation variable by species; flagellum pubescent; setae light yellow to translucent white. PRONOTUM: Pronotal field with Y-shaped median sulcus, opening anterior. Each external edge with 1 setigerous puncture at the angles of lateral and basal margins, 1 setigerous puncture in apical
region of lateral margin. *ELYTRA*: Each elytron with 8 striae, punctuation and setation variable by species. Lateral margins with single row of setigerous punctures from base to apex, margin broadly interrupted leaving a series of subapical punctures or foveae, number variable by species. *LEGS*: Profemur dilated. Protibia dilated and flattened as an adaptation for digging; median edge with subapical, pubescent groove adapted for use as an antennal cleaner, with curved, basal spine.

Several group and subgeneric arrangements have been derived for the genus *Dyschirius*, notably the group designations used by Lindroth (1961) and Bousquet (1988). Group and subgeneric usage does not seem to be consistent on a world-wide basis. Because of the limited number of species in Nebraska, the following species are not presented in these groups.

**Genus Dyschirius: Key to Adults of Nebraska Species**

1. Odd intervals of elytra (1, 3 etc.) with series of setigerous punctures ............. *D. setosus*

1'. Elytral intervals bare .................................. 2

2. Elytra with striae deep, nearly smooth, impunctate ........................................... *D. pallipennis*

2'. Elytra with 7-8 punctate striae ...................... 3

3. Elytral striae effaced, evidently punctate in basal half, punctures effaced ........ *D. montanus*

3'. Elytral striae deep and clearly punctate, at least in basal half ...................... 4

4. Protibia with external teeth rudimentary or absent (Figs. 3c, 4f) ...................... 5

4'. Protibia with 2 distinct external teeth, at least apical tooth sharp, basal tooth often reduced (Figs. 4c, 5c, 7c, 8c) .................. 7

5. Median subapical prong of protibia very short .............................................. *D. brevispinus*

5'. Median subapical prong of protibia normal (Figs. 3b, 4e) ....................... 6

6. Clypeus with binisinuate anterior margin (Fig. 3a) ........................................ *D. sphaericollis*

6'. Clypeus with straight or slightly arcuate margin at middle (Fig. 4d) ............. *D. truncatus*

7. Posterior margin of clypeus rugose, poorly defined, median subapical prong of protibia rudimentary or absent (Figs. 5a, b) .................. D. integer

7'. Posterior margin of clypeus well defined, median subapical prong of protibia normal to strong (Figs. 4a, b, 7a, b, 8 a, b) ................... 8

8. Anterior margin of clypeus trisinuate (Fig. 4a) .................. *D. haemorrhoidalis*

8'. Anterior margin of clypeus straight or slightly arcuate (Figs. 6, 7a, 8a) .......... 9

9. Width of clypeal field 3 times its depth, posterior limit elevated above frons at frontoclypeal suture (Figs. 6, 7a) ................... *D. erythrocerus*

9'. Width of clypeal field 2 times its depth, posterior limit not elevated above frons at frontoclypeal suture (Fig. 8a) ....................... *D. globulosus*

*Dyschirius setosus* LeConte

*Dyschirius setosus* LeConte, 1857: 79; *D. alternatus* Hatch, 1949: 117

**Description**: body length: 3.0 mm. **HEAD**: Dark red to dark reddish brown. Surface smooth. Clypeus triangular, apex emarginate, the margin beaded. Labrum with apex emarginate. Scape as long as pedicel, with 1 dorsal, setigerous puncture; setae light brown to whitish brown; pedicel pubescent; setae white to translucent white. **PRONOTUM**: Color as head. Surface smooth. Each lateral margin beaded, with single row of setigerous punctures, setae light brown. Discal region bounded by elevated arms of Y-shaped sulcus. Basal margin crenulate. **ELYTRA**: Color as head. Surface smooth. Elytral striae poorly developed, mainly represented by punctuation; odd intervals with setigerous punctures from base to apex, setae light yellowish brown. Lateral margins completely beaded with single row of setigerous punctures, setae light yellowish brown to whitish brown, margin broadly interrupted leaving 3 subhumeral foveae; 2 preapical punctures present. **LEGS**: Color as head. Protibia without lateral teeth; terminal and subapical spurs enlarged.

**Distribution**: Restricted to North America. Transamerican from Alaska south to Nebraska, east to New York and Maryland (Csiki, 1927; Blackwelder and Arnett et al., 1977; Lindroth, 1961).

**Locality Records**: CUMING COUNTY: West Point (3 collections); SAUNDERS: Cedar Bluffs (1).

**Temporal Distribution**: April (1 collection), May (1), June (1).
**Dyschirius pallipennis** (Say)

*Clivina pallipennis* Say, 1825: 24

**Description:** Body length: 3.5–4.0 mm. **HEAD:** Reddish brown. Surface smooth. Fronto longitudinal grooves shallow. Clypeus square, apex emarginate with denticulate apical lateral angles, center of clypeus raised or swollen. Labrum rectangular with lateral lobes, apex emarginate with prominent dorsal horn. Scape as long as pedicel, with 1 setigerous puncture; setae reddish brown, dorsal tooth present; pedicel with sparse reddish brown setae. **PRONOTUM:** Color as head except Y-shaped sulcus black. Surface smooth. Lateral and basal margins completely beaded. **ELYTRA:** Color as head. Surface smooth. Elytral striae very deep, complete from base to apex, without punctation. Lateral margins completely beaded; with single row of punctures in basal 2/3, subhumeral fovea absent; 1 or 2 preapical punctures present. **LEGS:** Protibia with two rudimentary lateral teeth; terminal and subapical spurs enlarged.

**Distribution:** Eastern North America from Quebec west to Alberta and South Dakota, south to Nebraska and Florida (Csiki, 1927; Blackwelder and Arnett et al., 1977; Bousquet, 1987; Lindroth, 1961).

**Locality Records:** CUMING COUNTY: West Point (4 Collections); RICHARDSON: Rulo (1).

**Temporal Distribution:** June (5 collections).

**Dyschirius montanus** LeConte

*Dyschirius montanus* LeConte, 1879: 507; *D. thompsoni* Hatch, 1949: 117

**Description:** Body length: 2.0 mm. **HEAD:** Reddish brown. Surface smooth. Eye margins beaded. Clypeus with apical margin emarginate. Labrum truncate, apex emarginate; anterolateral margins bilobed, with ventral pubescence, setae reddish brown to gold. Scape as long as the next 2 segments, 1 dorsal setigerous puncture, dorsal tooth present; pedicel pubescent, setae golden. **PRONOTUM:** Color as head. Surface punctate. Y-shaped median sulcus effaced. Lateral margins beaded. Basal margin beaded. **ELYTRA:** Color as head. Surface smooth. Elytral striae complete from base to apex, punctate in humeral 1/3. Lateral margins completely beaded; with single row of punctures, margins broadly interrupted leaving 1 subhumeral fovea; 2 preapical punctures present. **LEGS:** Color as head. Protibia with 2 lateral teeth; terminal and subapical spurs enlarged.

**Distribution:** This species may be transamerican; however, erratic and incomplete locality records lead to a patchy distribution (Lindroth, 1961). Southern Canada from Quebec west to British Columbia; western United States from Washington west to South Dakota, south to Nebraska and Colorado (Blackwelder and Arnett et al., 1977; Lindroth, 1961).

**Locality Records:** CUMING COUNTY: West Point (3 collections).

**Temporal Distribution:** June (3 collections).

**Dyschirius brevispinus** LeConte

*Dyschirius brevispinus* LeConte, 1878: 593

**Description:** Body length: 3.5 mm. **HEAD:** Dark reddish brown. Surface smooth. Clypeus subquadrate, apex emarginate. Labrum subquadrate, surface granulated; apex deeply emarginate; lateral lobes with ventral setae, setae light brown to gold. Scape as long as the next 1 1/2 segments; pedicel with 4 setae. **PRONOTUM:** Color as head. Surface smooth. Basal margin complete. Lateral margins prolonged onto peduncle as raised, transverse bead parallel to basal margin. **ELYTRA:** Color as head. Surface smooth. Striae punctate; striae 1, 2 reaching nearly to apex; remaining striae obliterated below elytral midpoint. Lateral margins completely beaded; with single row of punctures above and along each lateral margin, broadly interrupted leaving 3 subhumeral setigerous foveae, setae whitish brown; 2 subapical punctures present. **LEGS:** Color as head. Protibia with 2 lateral rudimentary teeth; terminal spur enlarged, with basal setigerous puncture, setae light brown; a single poorly-developed subapical spine present, with a single basal setigerous puncture, seta light brown.

**Distribution:** Lindroth (1961) noted this species to be rare, resulting in a restricted distribution. Southeastern Canada from Ontario east to Quebec; northern United States from Michigan, Pennsylvania and Ohio west to Nebraska. The Nebraska specimen represents the westward edge of the described distribution (Csiki, 1927; Blackwelder and Arnett et al., 1977; Bousquet, 1987; Lindroth, 1961).

**Locality Records:** CUMING COUNTY: West Point (1 collection).

**Temporal Distribution:** June (1 collection).

**Dyschirius sphaericollis** (Say)

*Clivina sphaericollis* Say, 1825: 23

**Description:** Body length: 4.75–5.0 mm. **HEAD:** (Fig. 3a) Dark red to dark violet brown. Surface rugose to smooth. Clypeus trisinuate, apical margin beaded. Labrum punctate, apex widely emarginate; lateral lobes with ventral pubescence, setae light yellowish brown to gold. Scape as long as next 2 segments, with a single dorsal setigerous puncture, setae light yellowish brown; pedicel pubescent, setae light yellowish brown to gold. **PRONOTUM:** Color as head except lateral margins black. Surface smooth. Lateral margins beaded, basal margins absent. **ELYTRA:** Color as head. Surface smooth. Elytral striae reaching from base to apex, punctate from base to 1/2 length of elytron. Lateral margins...
Dyschirius integer LeConte, 1851: 196; D. apicalis LeConte, 1850: 204 (name preoccupied); D. nigripes LeConte, 1853: 363; D. basalis LeConte, 1857: 77; D. nigriceps LeConte, 1853: 396; D. transmarinus Mannerheim, 1853: 122

Description: Body length: 3.0 mm. HEAD: (Fig. 5a) Dark red to brown. Surface smooth. Clypeus short, rectangular; lateral lobes denticulate; apex emarginate. Labrum truncate, apex deeply emarginate; lateral lobes with ventral pubescence, setae white to translucent white. Scape as long as pedicle, with 1 dorsal setigerous puncture, setae white to clear; pedicel pubescent, setae white. PRONOTUM: Color as head except Y-shaped sulcus black. Surface smooth. Lateral margins completely beaded; with single row of punctures, broadly interrupted leaving 3 subhumeral foveae; 2 preapical punctures present. LEGS: (Figs. 4b, c) Color as head. Protibia with 2 sharp external teeth; terminal spur enlarged, subapical spur absent.

Remarks: While Dyschirius apicalis LeConte (1850:204) is the oldest described name, it is preoccupied by Dyschirius apicalis Putzeys (1846:556) (Csiki 1927).

Distribution: Transamerican from Alaska south to New York, South Dakota, California and Nebraska. The Nebraska specimen represents the southern edge of the described distribution (Blackwelder and Arnett et al., 1977; Lindroth, 1961).

Locality Records: CUMING COUNTY: West Point (1 collection).

Temporal Distribution: June (1 collection).

Dyschirius haemorrhoidalis (Dejean, 1831: 511)

Clivina haemorrhoidalis Dejean, 1831

Description: Body length: 2.25 - 2.5 mm. HEAD: (Fig. 4a) Yellowish brown. Surface smooth. Frons with raised cross formed by 2 transverse, parallel carinae and 1 median longitudinal carina; apex of median longitudinal carina ending in small, curved horn. Clypeus with apex emarginate, trinicate, with 2 transverse carinae. Labrum truncate, with lateral lobes, apex prominent; lobes with dense ventral pubescence, setae golden. Scape as long as next 1 1/2 segments; 1 dorsal, setigerous puncture present, setae light brown; pedicel pubescent, setae light yellowish brown to light brown. PRONOTUM: Color as head except Y-shaped sulcus black. Surface smooth. Lateral margins beaded, prolonged onto peduncle as transverse bead parallel to true basal margin. Basal margin completely beaded. ELYTRA: Dark red except apical 1/3 light yellowish brown to golden. Elytral striae complete from base to apex, punctate from base to 1/2 length of elytron. Lateral margins completely beaded; with a single row of setigerous punctures, margins interrupted broadly leaving 3 subhumeral foveae, setae light brown; two preapical punctures present. LEGS: (Figs. 4b, c) Yellowish brown. Protibia apically dilated; with 2 lateral teeth, apical tooth sharp, subapical tooth reduced; terminal and subapical spurs enlarged.
**Dyschirius globulosus**

Brown to gold. Scape as long as next 1 1/2 segments; pedicel parallel to basal margin. Basal margin complete, surface emarginate; lateral lores with ventral setae, setae light quadrate with lateral lobes; apex emarginate; a single clypeal pubescent, setae light yellowish brown.

**Dyschirius erythrocerus** LeConte

Dyschirius erythrocerus LeConte, 1857: 78

**Description:** (Fig. 7) Body length: 4.5 - 5.0 mm. **HEAD:** (Figs. 6, 7a) Dark reddish brown. Surface smooth. Clypeus subquadrate, apex emarginate, beaded, labrum bilobed, surface granulate; apex deeply emarginate; lateral lobes with ventral setae, setae light brown to gold. Scape as long as next 1 1/2 segments; pedicel pubescent, setae light yellowish brown to light brown. **PRONOTUM:** Dark brown. Surface smooth. Lateral margins beaded, prolonged onto peduncle as transverse bead parallel to basal margin. **ELYTRA:** Color as head. Surface smooth. Elytral striae complete from base to apex, punctate in basal 2/3 only. Lateral margins completely beaded; with single row of punctures, margin broadly interrupted leaving 1 subhumeral setigerous fovea, setae light brown; 2 preapical punctures present. **LEGS:** (Figs. 8b, c) Dark reddish brown. Protibia broad, dilated, with 2 lateral teeth, apical tooth sharp, subapical tooth reduced; terminal and subapical spurs enlarged.

**Distribution:** Nearly transamerican, but unknown on the Pacific coast; from Newfoundland, New York and Delaware south to Florida, west to South Dakota and Nebraska (Csiki, 1927; Blackwelder and Arnett et al., 1977; Lindroth, 1961).

**Locality Records:** CUMING COUNTY: Southbend (1 collection); CUMING: West Point (22); FILLMORE: Fairmont (2); LANCASTER: Lincoln (8); SAUNDERS: Ashland (1); SIoux: Pine Ridge (2).

**Temporal Distribution:** March (1 collection), April (2), May (1), June (8), July (6).

**Genus Clivina** Latreille

Clivina Latreille, 1802: 96; *Eupalamus* Schmidt-Goebel, 1846:pl.3; *Paraclivina* Kult, 1947: 31; *Semiclivina* Kult, 1947: 31

Nebraska species of *Clivina* share the following characteristics: **HEAD:** Frontal longitudinal suture reaching from posterior base of each eye to frontoclypeal suture. A broad carina rises between frontolongitudinal suture and eye margin, extending from base of each eye to frontoclypeal suture; each carina with 2 setigerous punctures, 1 each at anterior and posterior of each eye, setae light yellow to light brown. Frontal field with large central fovea, most distinct in *C. impressifrons*. Antennae 11-segmented; scape with single setigerous punctuation; pedicel glabrous; flagellum pubescent, setae light yellow to golden. **PRONOTUM:** Each lateral margin with 2 setigerous punctures, 1 each near posterior lateral angle and anterolateral angle. Lateral margins prolonged behind posterior setigerous punctuation either forming sides of peduncle, or a complete basal ridge parallel to true basal margin. Pronotal field with a median Y-shaped sulcus, opening anterior. **ELYTRA:** Margins completely beaded. Each elytron with 8 usually punctate striae. Each lateral margin with single row of setigerous punctures extending from humerus to apex, complete, lacking subhumeral fovea. **LEGS:** Profemur dilated, *C. dentipes* alone with single apical tooth. Protibia broad, dilated and flattened; median edge with pubescent groove modified as antennae cleaner, usually with a curved, basal spine, setae golden.
**Genus Clivina: Key to Adults of Nebraska Species**

1. Base of pronotum with bead complete (Figs. 9a, b) .................................. 2

1. Base of pronotum lacking bead (Figs. 11a, b) ........................................... 3

2. Prothorax punctate, punctures minute, shallow (Fig. 9b) .................. C. postica

2. Prothorax smooth, with faint C-shaped ridges (Fig. 9a) .................. C. bipustulata

3. Frons irregularly punctate, with median sulcate fossae (Fig. 11a); prothorax with irregular punctures (Fig. 12b); profemur without apical tooth (Figs. 11a, 12b) .......... C. impressifrons

3. Frons smooth, with shallow fossae or none, fossae never sulcate (Fig. 11b); prothorax smooth, with paired transverse beads (Fig. 12a); profemur with apical tooth .......... C. dentipes

**Clivina postica** LeConte

*Clivina postica* LeConte, 1848b: 213

**Description:** Body length: 5.5 - 6.0 mm. **HEAD:** Dark red. Surface smooth, except for small transverse granulated band behind eyes. Longitudinal frontal suture shallow, narrow, granulated. Frontoclypeal suture effaced. Clypeus subrectangular, apex emarginate, 1 setigerous puncture at each basal corner, setae reddish brown. Labrum rectangular, apex emarginate, apical corners denticulate, and with ventral pubescence, setae yellowish brown to light gold. Scape as long as next 3 segments, with 1 setigerous puncture, setae gold; scape with 1 small, distal, dorsal tooth. **PRONOTUM:** (Fig. 9b) Color as head except margins black. Surface punctate, punctures small. Pronotal disk with median Y-shaped sulcus, opening anterior; arms of sulcus punctate. **ELYTRA:** Color as head. Interval 3 with 3 dorsal setigerous punctures, setae light yellow. Elytra black with reddish clouding on elytral apices. **LEGS:** Red. Protibia with 3 distinct lateral teeth, 1 setigerous puncture at base of each tooth, setae light yellow; terminal spur enlarged, subapical spur reduced, with curved basal spine.

**Distribution:** North America from South Dakota south to Louisiana (Csiki, 1927; Blackwelder and Arnett et al., 1977).

**Locality Records:** **LANCASTER COUNTY:** Lincoln (2 collections).

**Temporal Distribution:** May (1 collection), June (1).

**Clivina bipustulata** (Fabricius)

*Scarites bipustulata* Fabricius, 1801: 125; *S. quadrimaculata* Beauvois, 1805: 107

**Description:** (Fig. 10) Body length: 8 - 9 mm. **HEAD:** Dark red to dark reddish brown. Surface smooth. Clypeus subtriangular with lateral carina ending in small apical teeth; 1 setae at each basal corner of clypeus, setae reddish brown. Labrum subrectangular, margins beaded, with transverse sinuous carina and four small apical horns, inner pair of horns smaller. Scape of antennae as long as next 2 segments. **PRONOTUM:** (Fig. 9a) Color as head except margin black, median y-shaped sulcus black. Surface smooth. Median Y-shaped sulcus. Angles of lateral and basal margins round, not denticulate. Lateral margins prolonged upon pedunce as a complete ridge parallel to basal margin, forming a false basal margin. **ELYTRA:** Reddish black except large, light reddish-brown clouding on basal and apical quarters. Interval 3 with 2 setigerous punctures, setae dark red. **LEGS:** Red. Protibia with 3 distinct lateral teeth, 1 setigerous puncture at base of each tooth, setae light yellow; terminal spur enlarged, subapical spur reduced, with curved basal spine.

**Distribution:** Eastern North America from Ontario, Delaware and Pennsylvania west to South Dakota, south to Florida, Arizona, and Mexico; also in the West Indies (Csiki, 1927; Lindroth, 1961; Blackwelder and Arnett et al., 1977).

**Locality Records** (Fig. 15) : **CASS COUNTY:** South bend (1 collection); **CUMING:** West Point (1); **FILLMORE:** Fairmont (6); **LANCASTER:** Lincoln (45); **RICHARDSON:** Rulo (1).

**Temporal Distribution:** April (2 collections), May (18), June (11), July (19), August (1), September (1), October (1).

**Clivina impressifrons** LeConte

*Clivina impressifrons* LeConte, 1844: 50

**Description:** Body length: 6.5 -7.0 mm. **HEAD:** (Fig. 11a) Dark red to reddish brown. Surface smooth. Frontal longitudinal suture wide, surface granulated. Clypeus rugose with beaded margin, apex slightly emarginate. Labrum rectangular; apical margin bisinuate; apical corners with ventral pubescence, setae light yellow. Scape as long as the next 2 segments, with dorsal apical tooth. **PRONOTUM:** (Fig. 12b) Color as head. Surface smooth to lightly punctate. Pronotal field with median Y-shaped sulcus, opening anterior; color black, arms punctate. **ELYTRA:** Color as head. Interval 3 with 3 dorsal, setigerous punctures, setae light yellowish brown. **LEGS:** Color as head. Protibia with 4 lateral teeth, proximal tooth often obsolete, each tooth with basoventral setae, setae reddish brown; terminal spur enlarged; subapical spur reduced, with curved basal spine.
**Distribution**: Eastern North America: New York, Delaware west to South Dakota, south to Kansas, Iowa and Texas (Csiki, 1927; Lindroth, 1961; Blackwelder and Arnett et al., 1977).

**Locality Records** (Fig. 15): CASS COUNTY: Southbend (1 collection); CUMING: West Point (1); FILLMORE: Fairmont (7); LANCASTER: Lincoln (45); RICHARDSON: Rulo (2).

**Temporal Distribution**: April (4 collections), May (11), June (1), July (34), August (2).

**Clivina dentipes** Dejean

*Clivina dentipes* Dejean, 1825: 415; C. *confusa* LeConte, 1844: 50; C. *corvina* Putzeys, 1846: 610; C. *fissipes* Putzeys 1846: 607; C. *georgiana* LeConte 1857: 81

**Description**: Body length: 8.0 - 8.5 mm. **HEAD**: (Fig. 11b) Dark reddish brown. Surface smooth. Shallow transverse groove behind eyes, groove punctate. Clypeus nearly square; apical margin emarginate, beaded; each apical corner of clypeus with 1 setigerous puncture, setae light brown. Labrum oval, apex prominent. Scape as long as next 2 segments, with single setigerous puncture, setae light yellowish brown; pedicel surface granulated. **PRONOTUM**: (Fig. 12a) Color as head. Apical 3/4 with 10-12 dorsal, setigerous punctures, setae brown. **LYTREA**: Color as head. Interval 3 with 5 dorsal, setigerous punctures, setae brown. **LEGS**: Color red. Profemur with small apical tooth. Protibia with 4 lateral teeth, proximal tooth rudimentary; terminal spur enlarged; subapical spur reduced, with curved basal spine.

**Distribution**: Transamerican south of Canada: South Carolina, Georgia and Florida west through Texas and Arizona to California (Csiki, 1927; Blackwelder and Arnett et al., 1977).

**Locality Records**: LANCASTER COUNTY: Lincoln (3 collections).

**Temporal Distribution**: May (1 collection), July (2).

**ACKNOWLEDGMENTS**

The author wishes to thank Dr. Brett Ratcliffe and the University of Nebraska State Museum for resources, direction, and criticism during the course of this project.

**LITERATURE CITED**


