

New Records of Water Beetles (Coleoptera: Haliplidae, Gyrinidae, Dytiscidae, Hydrochidae, Hydrophilidae) from the Middle Russian Forest-Steppe

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PROKIN A. 2005. NEW RECORDS OF WATER BEETLES (COLEOPTERA: HALIPLIDAE, GYRINIDAE, DYTISCIDAE, HYDROCHIDAE, HYDROPHILIDAE) FROM THE MIDDLE RUSSIAN FOREST-STEPPE. - *Latvijas entomologs*, 43: 138-142.

Abstract: New records of 15 species from Lipetsk, Voronezh, Kursk, and Belgorod provinces are provided. The known ranges of these species are expanded by the new findings.

Key words: Coleoptera, Haliplidae, Gyrinidae, Dytiscidae, Hydrochidae, Hydrophilidae, forest-steppe, Russia, new records, new localities.

Introduction

The Middle Russian forest-steppe is characterized by continental climate conditions, which become more pronounced toward the southeast. The average air temperature ranges from 19.5° to 21.5° C in July, and from -10.5° to -9° C in January. Similarly, the average annual precipitation decreases from 550 mm in the NW to 450 mm in the SE. Black soils (chernozem) are dominant soils, in lowland areas solonetz soils and boggy ground may be encountered. The vegetation cover alternately varies between grassy steppe and forest with Pedunculate Oak (*Quercus robur*) and Scots Pine (*Pinus silvestris*) being the dominant tree species (Drozdov 1991).

Most of the streams and rivers flowing through the Middle Russian Forest-Steppe are part of the River Don basin, while the remaining ones pertain to the Dnepr and the Volga drainage systems.

In administrative aspect this territory includes Lipetsk (LP), Voronezh (VP), Orel, Tambov, Kursk (KP) and Belgorod (BP) provinces.

This note is based on the materials collected at the following localities: LP: Donskoye, 52°36'N / 38°55'E; Chichera River, 30 km E Elets, 52°33'N / 38°50'E; Dobrinskie

bolota, 8,3 km N Dobrinka, 52°13'N / 40°34'E; VP: Venevitinovo, Usmanskiy pine forest, 51°48'N / 39°23'E; Studyonovka, 51°09'N / 39°23'E; Divnogorye, 50°57'N / 39°26'E; Shkurlat, 50°22'N / 40°14'E; Rossosh, 50°11'N / 39°32'E; Boguchar, 49°56'N / 40°35'E; KP: Zorino, Zorinskiy sector of Tsentralno-Chernozyomniy Nature Reserve, 51°11'N / 36°22'E; BP: Gora-Podol, 50°28'N / 35°36'E.

Explanations: ind. – individual(-s). Most of the specimens are in the author's collection. When "leg." and "det." was not given for the species it means that the species was collected and identified by the author.

List of Species

Familia **Haliplidae**

Haliphus (Haliplidius) varius NICOLAI, 1822
Rossosh, 14.08.2003, Chernaya Kalitva river, 2 ind.

Distribution: European species, previously recorded in Russia south to Moscow, Bryansk, Penza, Saratov prov. (Zaitzev 1953). Also reported by Kharin (1928) from Chernaya Kalitva river in Voronezh prov., but the material is probably lost. Our finding confirms Kharin's data.

Haliphus (H.) obliquus (FABRICIUS, 1787)

Shkurlat, 14.08.2003, puddle with clay bottom, 2 ind.

Distribution: Europe (widespread), ? Siberia. Morocco, Turkey, Iran, Iraq and Transcaucasia (Vondel 1997). Nearest known localities are in Rostov prov. (Minoranskiy, Djumaylo 1974), Volgograd prov. (Brekhov 2001a) and Severskiy Donets River Basin (Zakharenko, Gramma 1979).

Haliphus (Haliphus) furcatus SEIDLITZ, 1887

Studyonovka, 17.04.2003, inundated marsh of Khvorostan River, 1 ind.

Distribution: Rare European and western Siberian species. In investigated provinces known from Kursk (KP) (Zaitzev 1953). Nearest localities: Volgograd prov. (Vondel 2003), Severskiy Donets River Basin (Zakharenko, Gramma 1979).

Familia **Gyrinidae***Aulonogyrus concinnus* (KLUG, 1834)

Gora-Podol, 29.08.2004, Vorskla River, 48 ind.

Distribution: southern Palearctic species. Recently reported from South Urals (Petrov 2003). Nearest known locality is in Kharkov prov., Ukraine (Zaitzev 1929). In European Russia this species was known from Rostov prov. (Minoranskiy, Djumaylo 1974). This locality is the northernmost known in European Russia

Familia **Dytiscidae***Hydrovatus cuspidatus* (KUNZE, 1818)

Zorino, 22.07.2002, semipermanent karstic lake, 1 ind., 29.07.03, ibid., 1 ind.

Distribution: mainly a Mediterranean, Central and South Europe (including Ukraine), Transcaucasus. In Russia this species is known from Voronezh prov. (Kharin 1928; Prokin et al. 2002) and Volgograd prov. (Brekhov 1999; Brekhov, Feodorov 2000; Brekhov 2001b; Brekhov et al. 2003).

Bidessus grossepunctatus VORBINGER, 1907

Venevitinovo, 19.07.2002, 1 ind., 15.08.2002, 1 ind., 5.08.2003, 1 ind., 19.07.2004, 1 ind., "Klyukvennoye-3" bog, sphagnum pool, 16.08.2004, grassy bog, sphagnum in water, 2 ind.

Distribution: European and western Siberian species. In European Russia known from Novgorod prov. (Zaitzev 1953) and Chuvashia (Egorov 2002). This locality is the southernmost known in European Russia.

Hydroporus umbrosus (GYLLENHALL, 1808)

Zorino, 22.05.2002, sphagnum bog, pool, 1 ind., leg. A.E. Silina.

Distribution: from most of northern and central Europe and Siberia to Primorye and Kamchatka. Nearest known localities are in Kaluga (Zaitzev 1930), Voronezh (Prokin et al. 2002) and Ulyanovsk (Feodorov 1999) prov. and Kharkov prov. of Ukraine (Gramma 1968). This locality is the southernmost known in European Russia.

Hydroporus obscurus STURM, 1845

Dobrinskie bolota, 8.09. 2004, Razreznoye bog, sphagnum pool, 1 ind.

Distribution: Holarctic boreal-montane species. Nearest known locality is in Kharkov prov., Ukraine (Gramma 1968). This locality is the southernmost known in European Russia.

Laccornis oblongus (STEPHENS, 1835)

Zorino, 22.07.2002, sphagnum bog, reed pool, 2 ind.

Distribution: Holarctic boreal species, reported in the Nearctic only from N Canada. Nearest known localities are in Voronezh (Prokin, Tsurikov 2001), Ulyanovsk (Feodorov 1999) prov., Chuvashia (Egorov 2002) and northern part of Severskiy Donets River Basin (Zakharenko, Gramma 1979). This locality is the southernmost known in European Russia.

Agabus (Agabus) bifarius (KIRBY, 1837)

Zorino, 22.07.2002, sphagnum bog, reed pool, 1 ind.

Distribution: Holarctic boreal species, in the Palearctic known from Ukraine, Belarus, central and northern European Russia (Yaroslavl, Vladimir, Archangelsk, Kaliningrad prov. and Chuvashia). Possibly, present also in Siberia. Nearest known localities are in Voronezh prov. (Prokin et al. 2002), Kharkov prov., Ukraine (as *Apator kessleri* Hochh.) (Zaitzev 1929), and northern part of Severskiy Donets River Basin (Zakharenko, Gramma 1979). This locality is the southernmost known in European Russia.

Agabus (*Gaurodytes*) *unguicularis*
(C.G. THOMSON, 1867)

Zorino, 22.05.2002, sphagnum bog, pool, 1 ind., leg. A.E. Silina, 29.10.2002, semipermanent karstic lake, aquatic moss, 1 ind., 3.10.2003, sphagnum bog, pool, 1 ind.

Distribution: a widespread northern Palearctic species, eastwards to eastern Siberia. In European Russia south to Moscow (Zaitzev 1953), Kaluga (Zaitzev 1930) and Ulyanovsk (Feodorov 1999) prov. This locality is the southernmost in European Russia.

Rhantus (*Rhantus*) *fennicus* HULDÉN, 1982

Venevitinovo, 05.1962, 1 ind., leg. anonymous, 07.1977, 1 ind., leg. anonymous (coll. Dept. Ecol. and Syst. of Invertebrate Animals, Voronezh University), det. Prokin et Petrov.

Distribution: recently described from Finland (Hulden 1982). Sweden, Belarus, Northern and Central Russia (previously recorded south to Moscow region (Nilsson, Holmen 1995)). This locality is the southernmost known.

Familia **Hydrochidae**

Hydrochus flavipennis KÜSTER, 1852

Divnogorye, 30.04.2000, inundated floodplain of the Don River, 1 ind., det. Shatrovskiy et Prokin.

Distribution: Croatia, Ukraine (Crimea), Caucasus, Azerbaijan (Shatrovskiy 1993; Ryndevich 2003). This locality is the northernmost known.

Familia **Hydrophilidae**

Laccobius (*Dimorpholaccobius*) *simulatrix*
D'ORCHYMONT, 1932

Donskoye, 9.07.1999, shallow pools with warm water on sandy bank of Don River at cattle watering place, 7 ind. (2 ind. in coll. Kharkov Entom. Soc.); Chichera River, 11.07.1996, 1 ind. (coll. Galichya Gora Nature Reserve), leg. Tsurikov, det. Prokin et Shatrovskiy.

Distribution: southern Palearctic species, eastern to western China, Kazakhstan, Turkmenia. Nearest known localities are in the Crimea. Zaitzev reported this species from Saratov, Russia, and the Donetsk prov. of Ukraine (as *L. kuwertii* Zaitz.) (Shatrovskiy 1984). The new localities are northernmost known in Russia.

Limnoxenus niger (ZSCHACH, 1788)

Boguchar, 15.08.2003, Levaya Bogucharka River, 1 ind., leg. A.E. Silina.

Distribution: southern European species. Nearest known localities are probably in Rostov (Minoranskiy, Djumaylo 1974) and Volgograd (Sidorenko, Brekhov 2004) prov. of Russia and Kharkov prov., Ukraine (Zaitzev 1929), because the N.N. Kharin (1928) record as "frequent everywhere" for Voronezh prov. is unreliable. Thus, this locality is the northernmost in Russia.

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