Cases of homonymy in some Palaearctic and Nearctic taxa of the genus Sorex L. (Mammalia: Soricidae)

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Taxonomy is an integrative part of the study of organismic biodiversity. Taxonomy includes the naming of taxa and the formal administration of available taxon names proposed since Linnaeus (1758). During almost 250 years of scientific descriptions of animals a number of homonyms have been proposed. Primary homonyms were unintentionally produced by different authors in simultaneous publications, sometimes in ignorance of existing literature, and sometimes caused by a long delay in the publication process (Baranova and Zaitsev 2003). Secondary homonyms were caused by subsequent combination changes of species-group names.

Worldwide checklists allow the detection and avoidance of homonyms. A checklist of recent mammal taxa is currently being prepared (Wilson and Reeder 2004) and will serve as an indispensable tool in the future. While compiling the chapter on shrews, the senior author (Hutterer 1993, 2004) identified a number of homonyms which require discussion and eventually the proposal of replacement names in accordance with the rules of the ICZN (1999). Here we discuss taxa in the genus Sorex and propose substitute names for primary junior homonyms for which we found no other available and potentially valid synonym (Art. 60, ICZN 1999).

Results and discussion

Soricomorpha Gregory, 1910
Soricidae G. Fischer, 1814
Sorex Linnaeus, 1758

Comments: The family Soricidae is Gotthelf Fischer (not Fischer von Waldeheim; see Hutterer 2003), and the year of description is 1814 (not 1817), as correctly stated by Pavlinov and Rossolimo (1987).

Sorex hoyi Baird, 1857

Sorex hoyi montanus (Brown, 1966)

Sorex hoyi montanus (Brown, 1966: 50), not Sorex montanus Kelaart, 1850: 211 [now Suncus montanus (Kelaart, 1850)], not Sorex isodon princeps montanus Skalon and Rajevsky, 1940: 199 [infra-subspecific name, not available], not Sorex isodon montanus Pavlinov, Borisenko, Kruskop and Yahontov, 1995: 36 [name listed in synonymy].


Distribution: Colorado and Wyoming, U.S.A.

Comments: The North American pygmy shrew Sorex hoyi Baird, 1857 occurs widely in the northern taiga zone of Alaska, Canada and the USA, with some isolated populations in the montane forests of the Appalachian and Rocky Mountains. Among the six subspecies recognized by Wilson and Ruff (1999), the form that inhabits Colorado and Wyoming is recognized as Sorex hoyi montanus (Brown, 1966). This taxon was originally described in Microsorex Coues, 1877, which is now a synonym of Sorex (George 1988). The combination Sorex hoyi montanus is a secondary junior homonym of Sorex montanus Kelaart, 1860, a taxon currently considered as a member of genus Suncus (Hutterer 1993). Article 59 of the ICZN (1999) states that, “If in a case of secondary homonymy the junior species-group name has not been replaced, and the relevant taxa are no longer considered congeneric, the junior name is not to be rejected, even if one species-group name was originally proposed in the current genus of the other.” This rule applies to the case in question, and therefore no further action is required. Sorex isodon princeps montanus Skalon and Rajevsky, 1940, is another candidate for homonymy. However, as an infra-
subspecific name it is not available (Article 45.5), although Pavlinov et al. (1995) probably made the name available by including montanus Skalon and Rajevsky in their list of synonyms and subspecies of Sorex isodon. S. i. montanus Pavlinov, Borisenko, Kruskop and Yahontov, 1995 is a synonym of S. i. isodon Turov, 1924, and also a junior homonym of Sorex hoyi montanus (Brown, 1966), which in conclusion may persist as the technical name for the pgymy shrew of Colorado and Wyoming.

Sorex caecutiens Laxmann, 1788

Sorex caecutiens okhotinae nom. nov.

Replacement name for Sorex caecutiens insularis Okhotina, 1993: 64, not Sorex obscurus insularis Cowan, 1944: 103.

Type locality: Russia, Siberia, Karaginsky Island (Bering Sea).

Distribution: The subspecies is confined to Karaginsky Island.


Sorex caecutiens kunashirensis nom. nov.


Type locality: Kunashir Island.

Distribution: Kunashir Island (Kurile Islands, Sea of Okhotsk).

Etymology: Named for the island where the subspecies occurs.

Comments: Masked shrews Sorex caecutiens Laxmann, 1788 are distributed from Poland and Scandinavia through most of Russia and the Far East (see map in Ohdachi et al. 2001). The species is morphologically and genetically variable, which has led to the description of 20 subspecies names (Hutterer 2004). Okhotina (1993) revised the subspecies taxonomy in the Far East. In 1985, she had prepared a manuscript which was published posthumously when it was prepared for publication and edited by M. V. Zaitsev and N. E. Dokuchaev. Three new subspecies of Sorex caecutiens were recognized: S. c. orii Kuroda, 1933 (with S. c. kurilensis Okhotina, 1984 as nomen nudum and synonym), S. c. insularis Okhotina, 1993 (here replaced by okhotinae nom. nov.), and S. c. longicaudatus Okhotina, 1993: 65. The last taxon characterized the subspecies from Kunashir Island. This name had been proposed earlier by Okhotina (1984) as Sorex caecutiens longicaudatus subspecies nov., unfortunately not accompanied by any diagnosis or description. Therefore, the name constitutes a nomen nudum (Pavlinov and Rossolimo 1987). In her unpublished manuscript draft of 1985, Maria Okhotina had proposed to call this form “S. caecutiens kunashirum Okhotina, subsp. nov.” Yet, the editors followed her earlier proposal (Okhotina 1984) and so the name Sorex caecutiens longicaudatus Okhotina, 1993: 65 became formally available. We now realize that it was preoccupied by Sorex longicaudatus Yoshikura, 1956: 267. This taxon was listed without any further description as part of the Sakhalin fauna by Kishida (1930). We agree with Kaneko and Maeda (2002) that Kishida’s name is a nomen nudum. However, Yoshikura (1956) subsequently provided a full diagnosis of this taxon based on a specimen (no. 25) collected by him at Shirutoru, Sakhalin, in 1934, and identified and measured by Kishida. The publication of Yoshikura fulfils all requirements of the Code for a valid species description, and Sorex longicaudatus Yoshikura, 1956 is therefore an available name. Unfortunately no holotype is available for this taxon, and from the description alone it is difficult to allocate it to one of the five Sorex species known to occur in Sakhalin (Sorex caecutiens, S. daphaenodon Thomas, 1907, S. gracillimus Thomas, 1907, S. minutissimus Zimmermann, 1780, S. unguiculatus Dobson, 1890). Comparing the external measurements given by Yoshikura (1956), the best fit of S. longicaudatus would be with Sorex gracillimus. As such, it would become a junior synonym of the typical S. gracillimus, for which Sakhalin is the type locality. Even in the event that S. longicaudatus will be identified with S. caecutiens, the name is not available for the Kunashir population. Okhotina (1993) demonstrated differences at the subspecies level between masked shrew populations occurring on Kunashir and Sakhalin islands. The Kunashir population therefore deserves a name of its own.

Sorex gracillimus Thomas, 1907

Sorex gracillimus kurodai nom. nov.


Type locality: Shikotan Island (Kurile Islands, Sea of Okhotsk).
Distribution: Shikotan, Polonsky, Zelenyi and Tan-fil’yev Islands (Okhotina 1993).


Comments: *S. gracillimus* inhabits a narrow coastal strip in the Far East of Eurasia. Okhotina (1993) also revised the subspecific taxonomy of the slender shrew. She named three subspecies, *S. g. minor* Okhotina, 1993 (Primorsky Territory), *S. g. natalae* Okhotina, 1993 (Kunashir Islands), and *S. g. granti*. The last name is preoccupied by *Sorex grantii* Barrett-Hamilton and Hinton, 1913, originally proposed for a species of the Inner Hebrides (Scotland) and now considered as a junior synonym of *Sorex araneus* L., 1958 (Hutterer 1993). Article 58 of the ICZN (1999) states that the endings -i or -ii are variant spellings of the same species-group name and are deemed to be homonyms. Hence the name *S. gracillimus granti* must be replaced.

The subspecies rank of *S. gracillimus kurodai* nom. nov. was confirmed on the basis of morphological investigations (Okhotina 1993). Odachi et al. (2001) did not include samples from either Shikotan or Kunashir Islands in their study of genetic variation of *S. gracillimus*, due to lack of suitable material from South Kurile Islands (Dokuchaev, pers. comm.).

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References


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