

Caddisflies (Trichoptera) from Finnmark, northern Norway

TROND ANDERSEN & LINN KATRINE HAGENLUND

Andersen, T. & Hagenlund, L.K. 2012. Caddisflies (Trichoptera) from Finnmark, northern Norway. *Norwegian Journal of Entomology* 59, 133–154.

Records of 108 species of Trichoptera from Finnmark, northern Norway, are presented based partly on material collected in 2010 and partly on older material housed in the entomological collection at the University Museum of Bergen. *Rhyacophila obliterated* McLachlan, 1863, must be regarded as new to Norway and *Rhyacophila fasciata* Hagen, 1859; *Glossosoma nylander* McLachlan, 1879; *Agapetus ochripes* Curtis, 1834; *Agraylea cognatella* McLachlan, 1880; *Ithytrichia lamellaris* Eaton, 1873; *Oxyethira falcata* Morton, 1893; *O. sagittifera* Ris, 1897; *Wormaldia subnigra* McLachlan, 1865; *Hydropsyche newae* Kolenati, 1858; *H. saxonica* McLachlan, 1884; *Brachycentrus subnubilis* Curtis, 1834; *Apatania auricula* (Forsslund, 1930); *A. dalecarlica* Forsslund, 1934; *Annitella obscurata* (McLachlan, 1876); *Limnephilus decipiens* (Kolenati, 1848); *L. externus* Hagen, 1865; *L. femoratus* (Zetterstedt, 1840); *L. politus* McLachlan, 1865; *L. sparsus* Curtis, 1834; *L. stigma* Curtis, 1834; *L. subnitidus* McLachlan, 1875; *L. vittatus* (Fabricius, 1798); *Phacopteryx brevipennis* (Curtis, 1834); *Halesus tessellatus* (Rambur, 1842); *Stenophylax sequax* (McLachlan, 1875); *Beraea pullata* (Curtis, 1834); *Beraeodes minutus* (Linnaeus, 1761); *Athripsodes commutatus* (Rostock, 1874); *Ceraclea fulva* (Rambur, 1842); *C. perplexa* (McLachlan, 1877) and *Mystazides longicornis* (Linnaeus, 1758) are previously not listed for Finnmark. The total number of Trichoptera species known to occur in Finnmark is now 126 of which three belong in Rhyacophilidae, three in Glossosomatidae, 10 in Hydroptilidae, two in Philopotamidae, two in Psychomyiidae, nine in Polycentropodidae, five in Hydropsychidae, one in Arctopsychidae, nine in Phryganeidae, three in Brachycentridae, one in Lepidostomatidae, 57 in Limnephilidae, one in Goeridae, two in Beraeidae, one in Sericostomatidae, three in Molannidae and 14 in Leptoceridae. Four of the species, *Oxyethira falcata*, *Asynarchus thedenii*, *Limnephilus diphyes* and *Ceraclea perplexa* are listed in the 2010 Norwegian Red List for Species.

Key words: Trichoptera, *Rhyacophila obliterated*, distribution, Finnmark, Norway.

Trond Andersen & Linn Katrine Hagenlund, Department of Natural History, University Museum of Bergen, P.O. Box 7800, NO-5020 Bergen, Norway.

E-mails: trond.andersen@um.uib.no, linn.hagenlund@student.uib.no

Introduction

The Trichoptera fauna in northern Norway has long attracted interest (see e.g. McLachlan 1899; Esben-Pedersen 1902, 1910; Siltalai 1908; Forsslund 1932). In his checklist of the Norwegian Caddisflies, Brekke (1946) listed 52 species from Finnmark. Later Solem (1970) recorded the Trichoptera species collected during the Zoological Museum, Oslo's expedition to Pasvik

in Sør-Varanger in 1967 (see Lillehammer 1967) and Tobias (1976a, 1976b, 1981), Tobias & Tobias (1971, 1976) and Mey (1987) have added species to the Trichoptera fauna in Finnmark. The River Altaelva has been closely monitored in connection with the construction of the hydroelectric power plant in the 1980's and several reports have been published, some of them also listing a few Trichoptera species (e.g. Bergersen 1987, 1992, Ugedal *et al.* 2003). Walseng & Huru

(1997) summarized the knowledge of freshwater invertebrates in Finnmark with emphasis on rare and threatened species, but did not add any new knowledge.

In the last updated checklist of Norwegian Trichoptera, Solem & Andersen (1996) list 92 species from Finnmark. In the present paper we follow this list when we record species as "new to" Norway or Finnmark. However, Tobias & Tobias (2010) maintain a checklist of species from Sør-Varanger and the Varanger Peninsula where several of these species are listed, but for most of these species the records are not documented with locality information. Recent lists from neighboring areas are the recent checklist from Finland (Salokannel *et al.* 2011) and a list from the Murmansk region by Dankova & Shutova (2002).

Even though the Trichoptera fauna in Finnmark is comparatively well studied, most published records are given only as occurrence in Finnmark without exact information about locality, date, number of specimens collected, etc. Further, there is surprisingly little Trichoptera material from the region in the Norwegian Natural History museums. This has constituted a major problem when compiling the Norwegian Red Lists. In the earlier Red Lists (e.g. Direktoratet for Naturforvaltning 1999), "Rare" (R) was used as a criteria and 15 species with occurrence in Finnmark were listed. In the 2010 Norwegian Red List for Species the criteria to include species emphasize actual, known threats (Kålås *et al.* 2010). This is more difficult to evaluate based on the scanty knowledge of many of the northern Trichoptera species and fewer species were included (Kjærstad *et al.* 2010).

Another incentive for setting up the project in Finnmark is the predicted changes in the fauna and flora due to global warming. Finnmark might be the most severely affected area in continental Norway and if we in the coming years shall be able to follow eventual changes in the Trichoptera fauna in our northernmost region, more detailed information about the occurrence and abundance of the different species is needed.

The present paper present new records of 108 species of Trichoptera from Finnmark. The paper

is based on material collected in 2010 during the project "Insects inhabiting freshwater and humid habitats in Finnmark, northern Norway" (Ekrem *et al.* 2012), but some older material housed in the Entomological collection at the University Museum of Bergen is also included. With few exceptions, only species which were not recorded for Finnmark by Solem & Andersen (1996) or were listed in the 2010 Norwegian Red List for Species (Kjærstad *et al.* 2010) are commented on.

Material and methods

More than 10.000 specimens of Trichoptera were collected during the project in Finnmark in 2010 and are listed under "Material" below. Some of these specimens were collected in a light trap operated by Reidar J.D.I. Voith at Svanhovd Research Station. The localities are described in Ekrem *et al.* (2012) and are referred to below by the locality number only. Further, a few unpublished records of species collected in Finnmark and housed in the Entomological collection at the University Museum of Bergen are listed as "Additional material" below. The biogeographical regions follow Økland (1981). The majority of the material is preserved in 75% alcohol but a few older specimens are pinned. All material is stored in the Entomological collection at the Department of Natural History, University Museum of Bergen (ZMBN).

The species

RHYACOPHILIDAE

Rhyacophila fasciata Hagen, 1859

Material. FinLoc08, 7–24 August 2010, 1♂1♀, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). The species was recorded for the first time in Norway by Forsslund (1932) from Fagernes in Ramfjord in costal Troms (TRY) and has later been recorded from the Oslofjord area in southeastern Norway (Solem & Andersen 1996). The species has an

eastern distribution in Fennoscandia and has been reported in Lapponia inarensis (Li) and Lapponia enontekiensis (Le) in northern Finland (Salokannel *et al.* 2011).

***Rhyacophila nubila* (Zetterstedt, 1840)**

Material. FinLoc05, 10–23 July 2010, 4♂♂; 7–24 August 2010, 30♂♂15♀♀; 24–30 August 2010, 5♂♂2♀♀, Malaise trap; 30–31 August 2010, 4♂♂, light trap. FinLoc08, 23 July–7 August 2010, 1♂; 7–24 August 2010, 18♂♂; 24–30 August 2010, 3♂♂1♀, Malaise trap. FinLoc15, 3 September 2010, 1♂, net. FinLoc18, 31 August 2010, 1♂, net. FinLoc21, 25 June–09 July 2010, 1♂; 24 July–6 August 2010, 2♂♂; 6–20 August 2010, 2♂♂; 20–31 August 2010, 2♂♂, Malaise trap. FinLoc30, 28 July 2010, 2♀♀, net. FinLoc56, 26 July–25 August 2010, 25♂♂2♀♀; 25 August–3 September 2010, 19♂♂2♀♀, Malaise trap; 26 July 2010, 1♂, net. FinLoc60, 2–3 September 2010, 2♂♂, light trap. FinLoc75, 7 September 2010, 1♂, net. FinLoc81, 20–30 July 2010, 1♂; 30 July–10 August 2010, 3♂♂1♀; 10–21 August 2010, 4♂♂3♀♀; 21 August–6 September 2010, 20♂♂3♀♀, Malaise trap; 7–8 September 2010, 2♂♂, light trap. FinLoc85, 22 September 2010, 1♂; 22 September–11 October 2010, 7♂♂, light trap, leg. R.J.D.I. Voith. FinLoc90, 1 August 2010, 1♂, net. FinLoc106, 29 July 2010, 1♂, net.

***Rhyacophila obliterata* McLachlan, 1863**

Material. FinLoc18, 31 August 2010, 1♂, net. FinLoc86, 7 September 2010, 1♂, net.

Remarks. The species is not listed for Norway by Solem & Andersen (1996). It is distributed in most parts of Europe including North and East Russia (Malicky 2012). In Finland it is recorded from the northern parts of the country, including Lapponia inarensis (Li) (Salokannel *et al.* 2011).

GLOSSOSOMATIDAE

***Glossosoma intermedium* (Klapálek, 1892)**

Material. FinLoc08, 11–26 July 2010, 1♀, Malaise trap. FinLoc56, 2–17 July 2010, 1♂; 17–26 July 2010, 1♀, Malaise trap.

Additional material. FV, Alta: Steinfossveien, 69.92976°N 23.26268°E, 30 June 1989,

28♂♂34♀♀, net, leg. B.A. Sagvolden.

***Glossosoma nylanderii* McLachlan, 1879**

Additional material. FI, Karasjok: Våljohka, 69.69326°N 25.93166°E, 26 July 1987, 2♂♂1♀, net, leg. G.E.E. Søli.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Sør-Trøndelag (Solem & Andersen 1996).

***Agapetus ochripes* Curtis, 1834**

Material. FinLoc18, 24 July 2010, 12♂♂3♀♀, net. FinLoc75, 31 July 2010, 2♂♂1♀, net.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Nord-Trøndelag (Solem & Andersen 1996).

HYDROPTILIDAE

***Agraylea cognatella* McLachlan, 1880**

Material. FinLoc08, 26 June–10 July 2010, 1♂, Malaise trap. FinLoc19, 25 June–9 July 2010, 5♂♂; 9–24 July 2010, 1♂, Malaise trap. FinLoc 21, 25 June–9 July 2010, 12♂♂; 9–24 July 2010, 3♂♂, Malaise trap. FinLoc69, 19 June 2010, 7♂♂, net. FinLoc92, 19 June 2010, 1♂, net.

Additional material. FI, Kautokeino: Vuottšjávre, 69.35875°N 24.02963°E, 3 August 1989, 10♂♂2♀♀, net, leg. A. Fjellberg.

Remarks. Due to the confusion with *A. multipunctata* Curtis, 1834 (see Andersen & Wiberg-Larsen 1987), Solem & Andersen (1996) listed *A. cognatella* only from Østfold, Akershus, Buskerud and Sør-Trøndelag. However, the species has previously been recorded from Finnmark (Brekke 1946; Solem 1970; Tobias & Tobias 1971) and two older (1924) records from Alta and Karasjok are displayed in Artskart (2012) based on material housed in the Tromsø Museum.

***Hydroptila forcipata* (Eaton, 1873)**

Material. FinLoc19, 25 June–9 July 2010, 24♂♂2♀♀; 9–24 July 2010, 8♂♂1♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 354♂♂9♀♀;

9–24 July 2010, 74♂♂10♀♀; 6–20 August 2010, 1♂, Malaise trap. FinLoc56, 17–26 July 2010, 1♂, Malaise trap. FinLoc75, 30 July 2010, 1♂1♀, net.

***Hydroptila tineoides* Dalman, 1819**

Material. FinLoc08, 26 June–10 July 2010, 1♂1♀; 10–23 July 2010, 2♂♂2♀♀; 23 July–7 August 2010, 1♂, Malaise trap. FinLoc19, 25 June–9 July 2010, 120♂♂5♀♀; 9–24 July 2010, 7♂♂1♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 295♂♂134♀♀; 9–24 July 2010, 96♂♂15♀♀; 24 July–6 August 2010, 1♂; 6–20 August 2010, 1♂, Malaise trap. FinLoc56, 2–17 July 2010, 1♂; 17–26 July 2010, 2♂♂, Malaise trap. FinLoc65, 24 June–20 July 2010, 2♂♂, Malaise trap. FinLoc75, 30 July 2010, 3♂♂5♀♀, net. FinLoc81, 24 June–20 July 2010, 33♂♂34♀♀; 20–30 July 2010, 5♀♀; 10–21 August 2010, 3♀♀, Malaise trap.

Additional material. FØ, Sør-Varanger: Sortbrysttjern, 69.15848°N 28.97891°E, 4 July 1989, 2♂♂1♀, net, leg. A. Fjellberg.

***Ithytrichia lamellaris* Eaton, 1873**

Material. FinLoc21, 24 July–6 August 2010, 1♂, Malaise trap. FinLoc81, 20 July–10 August 2010, 1♂; 10–21 August 2010, 4♂♂; 21 August–6 September 2010, 3♂♂1♀, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Sør-Trøndelag (Solem & Andersen 1996).

***Oxyethira falcata* Morton, 1893**

Material. FinLoc08, 26 June–9 July 2010, 1♂, Malaise trap. FinLoc42, 17–26 July 2010, 1♂, Malaise trap.

Additional material. HOY, Bergen: Fløyen, Blåmanen, 60.40426°N 5.36307°E, 29 June 1986, 19♂♂2♀♀, net, leg. A. Fjeldså, coll. ZMBN.

Remarks. The species has never been officially published from Norway, but was listed as critically endangered (CR) in the 2010 Norwegian Red List for Species (Kjørstad et al. 2010), based on specimens collected in Hordaland, western Norway. In Finland the species is distributed

north to Lapponia inarensis (Li) and Lapponia enontekiensis (Le) (Salokannel et al. 2011).

***Oxyethira flavicornis* (Pictet, 1834)**

Material. FinLoc19, 25 June–9 July 2010, 5♂♂; 9–24 July 2010, 3♂♂1♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 6♂♂; 9–24 July 2010, 4♂♂, Malaise trap.

***Oxyethira frici* Klapálek, 1891**

Material. FinLoc19, 25 June–9 July 2010, 57♂♂34♀♀; 9–24 July 2010, 2♂♂2♀♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 523♂♂494♀♀; 9–24 July 2010, 24♂♂32♀♀; 24 July–6 August 2010, 2♀♀; 6–20 August 2010, 1♀, Malaise trap. FinLoc81, 24 June–20 July 2010, 59♂♂85♀♀; 20–30 July 2010, 4♂♂9♀♀, Malaise trap.

***Oxyethira mirabilis* Morton, 1904**

Material. FinLoc08, 10–23 July 2010, 1♂, Malaise trap.

***Oxyethira sagittifera* Ris, 1897**

Material. FinLoc19, 25 June–9 July 2010, 1♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 2♀♀, Malaise trap. FinLoc65, 24 June–20 July 2010, 3♀♀, Malaise trap (det. J. Salokannel).

Remarks. The species was recorded as new to Norway from costal Sogn & Fjordane (SFY) by Andersen (1974). It has later been taken in Hordaland and Rogaland (Solem & Andersen 1996). In Finland the species is distributed north to Lapponia inarensis (Li) and Lapponia enontekiensis (Le) (Salokannel et al. 2011).

***Oxyethira simplex* Ris, 1897**

Material. FinLoc19, 25 June–9 July 2010, 1♂, Malaise trap. FinLoc21, 25 June–9 July 2010, 5♂♂; 9–24 July 2010, 2♂♂, Malaise trap. FinLoc42, 17–26 July 2010, 2♂♂; 26 July–25 August 2010, 2♀♀, Malaise trap. FinLoc75, 30 July 2010, 1♂, net. FinLoc81, 24 June–20 July 2010, 26♂♂8♀♀; 20–30 July 2010, 1♂2♀♀, Malaise trap.

PHILOPOTAMIDAE

Philopotamus montanus (Donovan, 1813)

Material. FinLoc05, 11–26 June 2010, 17♂♂; 26 June–10 July 2010, 64♂♂2♀♀; 10–23 July 2010, 6♂♂2♀♀; 23 July–7 August 2010, 4♂♂1♀; 7–24 August 2010, 2♀♀, Malaise trap. FinLoc08, 11–26 June 2010, 1♀; 26 June–10 July 2010, 3♂♂2♀♀; 23 July–7 August 2010, 1♀, Malaise trap. FinLoc67, 19 June 2010, 1♀, net. FinLoc81, 19 June 2010, 1♀, net. FinLoc90, 21 June 2010, 3♂♂4♀♀; 1 August 2010, 1♂, net. FinLoc92, 19 June 2010, 3♂♂1♀, net. FinLoc94, 17 June 2010, 1♂, net. FinLoc106, 18 June 2010, 14♂♂13♀♀; 29 July 2010, 1♂2♀♀, net.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 1♂2♀♀, net, leg. A. Fjellberg; FØ, Sør-Varanger: Vaggatem, 69.21411°N 29.15452°E, 5 July 1974, 1♂, net, leg. A. Fjellberg.

Wormaldia subnigra McLachlan, 1865

Material. FinLoc67, 7 September 2010, 1♂, net.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Nordland (Solem & Andersen 1996).

PSYCHOMYIIDAE

Lype phaeopa (Stephens, 1836)

Material. FinLoc68, 7 September 2010, 1♀, net. FinLoc81, 24 June–20 July 2010, 1♀, Malaise trap.

Psychomyia pusilla (Fabricius, 1781)

Additional material. FI, Karasjok: Våljohka, 69.69326°N 25.93166°E, 26 July 1987, 1♂, net, leg. G.E.E. Søli.

POLYCENTROPODIDAE

Cyrnus flavidus McLachlan, 1864

Material. FinLoc05, 23 July–7 August 2010, 1♂, Malaise trap. FinLoc29, 28 July 2010, 1♂, net.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 2♂♂, net, leg. A. Fjellberg.

Holocentropus insignis Martynov, 1924

Material. FinLoc19, 9–24 July 2010, 1♂, Malaise trap.

Additional material. FI, Kautokeino: Avzi, Bealjáščohkka, 69.03732°N 23.28929°E, 24 July 1987, 6♂♂, net, leg. G.E.E. Søli.

Holocentropus picicornis (Stephens, 1836)

Material. FinLoc19, 25 June–9 July 2010, 7♂♂2♀♀; 9–24 July 2010, 10♂♂; 24 July–6 August 2010, 3♂♂, Malaise trap.

Additional material. FI, Kautokeino: Avzi, Bealjáščohkka, 69.03732°N 23.28929°E, 24 July 1987, 6♂♂2♀♀, net, leg. G.E.E. Søli.

Neureclipsis bimaculata (Linnaeus, 1758)

Material. FinLoc65, 30 July–10 August 2010, 1♂, Malaise trap. FinLoc75, 31 July 2010, 3♂♂, net. FinLoc76, 7 September, 2010, 1♀, net.

Additional material. FØ, Sør-Varanger: Sortbrysttjern, 69.15848°N 28.97891°E, 5 July 1974, 2♂♂1♀; 4 July 1989, 2♂♂1♀, net, leg. A. Fjellberg; Vaggatem, 69.21411°N 29.15452°E, 5 July 1974, 1♂, net, leg. A. Fjellberg.

Plectrocnemia conspersa (Curtis, 1834)

Material. FinLoc05, 10–23 July 2010, 1♂1♀; 7–24 August 2010, 2♂♂1♀, Malaise trap. FinLoc06, 26 July 2010, 1♂, net. FinLoc08, 26 June–10 July 2010, 1♂; 10–23 July 2010, 1♂1♀; 23 July–7 August 2010, 1♂1♀, Malaise trap; 23 July 2010, 1♀, net. FinLoc30, 28 July 2010, 1♂, net. FinLoc36, 28 July 2010, 1♂, net. FinLoc55, 26 July 2010, 1♀, net. FinLoc85, 10 August 2010, 6♂♂, light trap, leg. R.J.D.I. Voith.

Additional material. FV, Kvalsund: Repparfjordfjellet, Aidaroaivoe, 70.27716°N 24.10044°E, 12 July 1989, 1♂, net, leg. A. Fjellberg; Nordkapp: Kjelvik, 71.00234°N 26.11264°E, 23–26 July 1947, 2♂♂, net, leg. A. Tjønneland & N. Lønøy; FI, Karasjok: Karasjok, 69.47025°N 25.50783°E, 15 July 1947, 2♂♂, net, leg. A. Tjønneland & N. Lønøy; FN, Vardø: Kiby, Sjåbuselva, 70.06213°N 29.89595°E, 27

July 1987, 16♂♂, net, leg. G.E.E. Søli; **FØ**, Sør-Varanger: Ellenvatnet, 69.11823°N 28.90898°E, 1 August 1996, 1♂, net, leg. J. Skartveit.

***Polycentropus flavomaculatus* (Pictet, 1834)**

Material. FinLoc03, 25 July 2010, 4♂♂, net. FinLoc18, 24 July 2010, 1♂, net. FinLoc19, 25 June–09 July 2010, 1♂; 24 July–6 August 2010, 1♂2♀♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 189♂♂6♀♀; 9–24 July 2010, 95♂♂14♀♀; 24 July–6 August 2010, 20♂♂7♀♀; 6–20 August 2010, 1♂, Malaise trap. FinLoc60, 27 July 2010, 1♂, net. FinLoc65, 24 June–20 July 2010, 1♂, Malaise trap. FinLoc68, 31 July 2010, 1♂, net. FinLoc81, 24 June–20 July 2010, 7♂♂1♀; 20–30 July 2010, 2♂♂; 30 July–10 August 2010, 1♂, Malaise trap; 30 July 2010, 2♂♂, net.

Additional material. **FV**, Kvalsund: Repparfjordfjellet, Aidaroaivoe, 70.27716°N 24.10044°E, 12 July 1989, 11♂♂, net, leg. A. Fjellberg; **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24–25 July 1987, 9♂♂, net & Malaise trap, leg. G.E.E. Søli; Karasjok: Våljohka, 69.69326°N 25.93166°E, 26 July 1987, 2♀♀, net, leg. G.E.E. Søli; **FØ**, Sør-Varanger: Sortbrystjern, 69.15848°N 28.97891°E, 5 July 1974, 2♂♂2♀♀; 4 July 1989, 1♂1♀, net, leg. A. Fjellberg.

HYDROPSYCHIDAE

***Hydropsyche newae* Kolenati, 1858**

Material. FinLoc18, 24 July 2010, 1♂1♀, net. FinLoc65, 10–21 August 2010, 1♂1♀, Malaise trap. FinLoc85, 6–7 September 2010, 10♀♀, light trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). It was, however, listed from the River Altaelva in Finnmark by Bergersen (1987). In Norway the species is previously recorded from the southeastern parts of the country and from Sør-Trøndelag and Nord-Trøndelag (Solem & Andersen 1996).

***Hydropsyche saxonica* McLachlan, 1884**

Additional material. **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 4♂♂2♀♀, net, leg. A. Fjellberg.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). It was first published from Norway from Lake Råvatn in Troms (Bongard et al. 1991) and records from Nord-Trøndelag and Nordland are displayed in Artskart (2012).

ARCTOPSYCHIDAE

***Arctopsyche ladogensis* (Kolenati, 1859)**

Material. FinLoc19, 25 June–9 July 2010, 2♂♂, Malaise trap. FinLoc21, 12–25 June 2010, 1♂; 25 June–9 July 2010, 8♂♂3♀♀; 9–24 July 2010, 1♀, Malaise trap. FinLoc56, 2–17 July 2010, 1♂; 17–26 July 2010, 1♂1♀, Malaise trap. FinLoc81, 24 June–20 July 2010, 3♂♂, Malaise trap.

Additional material. **FV**, Alta: Steinfossveien, 69.92976°N 23.26268°E, 30 June 1989, 3♂♂1♀, net, leg. B.A. Sagvolden; Kvalsund: Repparfjordelv, 70.44921°N 24.35276°E, 25 July 1975, 1♂1♀, net, leg. P. Undheim; **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24 July 1987, 1♂, net, leg. G.E.E. Søli; Gievdneguoika, 69.19391°N 23.57546°E, 3 July 1989, 2♂♂, net, leg. A. Fjellberg; Låhpoluoppal, 69.20953°N 23.76158°E, 2 July 1989, 1♂, net, leg. B.A. Sagvolden; **FN**, Tana: Tana bru, 70.19896°N 28.20156°E, 3 July 1989, 1♂, net, leg. B.A. Sagvolden.

PHRYGANEIDAE

***Agrypnia obsoleta* (Hagen, 1864)**

Material. FinLoc19, 9–24 July 2010, 1♂, Malaise trap. FinLoc21, 9–24 July 2010, 1♀; 24 July–6 August 2010, 1♀, Malaise trap. FinLoc22, 24 July 2010, 1♂1♀, net. FinLoc56, 26 July 2010, 1♂, net. FinLoc65, 24 June–20 July 2010, 5♂♂9♀♀; 20–30 July 2010, 1♂5♀♀; 30 July–10 August 2010, 3♂♂8♀♀; 10–21 August 2010, 1♂, Malaise trap; 31 July 2010, 3♂♂1♀, net. FinLoc69, 30 July 2010, 3♂♂2♀♀, net. FinLoc76, 7 September 2010, 2♂♂1♀, net. FinLoc85, 10 August 2010, 2♂♂2♀♀, light trap, leg. R.J.D.I. Voith. FinLoc89, 31 July 2010, 1♀, net. FinLoc92, 30 July 2010, 1♀, net. FinLoc105, 29 July 2010, 2♂♂, net.

Additional material. **FV**, Måsøy: Hjelmsøy,

71.08229°N 24.78792°E, 26 July 1984, 1♂, net, leg. A. Fjellberg; **FØ**, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 1♂1♀, net, leg. J. Skartveit; Noatun, 69.16532°N 29.24579°E, 5 July 1989, 1♂1♀, net, leg. A. Fjellberg.

***Agrypnia pagetana* Curtis, 1835**

Material. FinLoc19, 25 June–9 July 2010, 5♂♂, Malaise trap.

Additional material. **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 4♂♂2♀♀, net, leg. A. Fjellberg; **FØ**, Sør-Varanger: Noatun, 69.16532°N 29.24579°E, 5 July 1989, 3♀♀, net, leg. A. Fjellberg.

***Agrypnia picta* Kolenati, 1848**

Additional material. **FØ**, Sør-Varanger: Ellenvatnet, 69.11823°N 28.90898°E, 1 August 1996, 1♀, net, leg. J. Skartveit.

***Oligostomis reticulata* (Linnaeus, 1761)**

Material. FinLoc19, 25 June–9 July 2010, 1♂, Malaise trap. FinLoc65, 30 July–10 August 2010, 1♀, Malaise trap. FinLoc69, 19 June 2010, 1♂, net. FinLoc89, 20 June 2010, 6♂♂1♀, net.

Additional material. **FØ**, Sør-Varanger: Skogfoss, 69.37505°N 29.70109°E, 29 July 2006, 1♂, net, leg. T.R. Nielsen.

***Oligotricha lapponica* (Hagen, 1864)**

Additional material. **FØ**, Sør-Varanger: Grenseneset, 69.66801°N 30.12758°E, 19 July 1969, 1♀, net, leg. T.R. Nielsen.

***Phryganea bipunctata* Retzius, 1783**

Material. FinLoc65, 24 June–20 July 2010, 13♂♂; 20–30 July 2010, 1♂; 30 July–10 August 2010, 1♂1♀, Malaise trap.

Additional material. **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 1♂, net, leg. A. Fjellberg; Hávgačávri, 68.83897°N 23.19930°E, 23 July 1987, 16♂♂2♀♀, net, leg. G.E.E. Søli; **FØ**, Sør-Varanger: Sortbrystjern, 69.15848°N 28.97891°E, 5 July 1974, 1♂, net, leg. A. Fjellberg.

***Phryganea grandis* Linnaeus, 1758**

Material. FinLoc85, 10 August 2010, 3♂♂1♀, light trap, leg. R.J.D.I. Voith.

BRACHYCENTRIDAE

***Brachycentrus subnubilis* Curtis, 1834**

Material. FinLoc65, 24 June–20 July 2010, 1♂, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway the species is previously only recorded from Akershus, Hedmark, Buskerud, Sør-Trøndelag and Nord-Trøndelag (Solem & Andersen 1996, Artskart 2012).

***Micrasema gelidum* McLachlan, 1876**

Material. FinLoc03, 25 July 2010, 1♂1♀, net. FinLoc 56, 27 July–25 August 2010, 1♂, Malaise trap. FinLoc64, 27 July 2010, 1♂, net. FinLoc81, 24 June–20 July 2010, 23♂♂3♀♀, Malaise trap.

Additional material. **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24 July 1987, 1♀, net, leg. G.E.E. Søli; **FN**, Berlevåg: Gednje, 70.62044°N 29.13446°E, 4 July 1989, 1♂1♀, net, leg. B.A. Sagvolden.

***Micrasema setiferum* (Pictet, 1834)**

Material. FinLoc68, 20 June 2010, 1♂, net.

Remarks. Solem (1970) listed *Micrasema nigrum* (Brauer, 1857) from Sør-Varanger. In Fauna Europaea Malicky (2012) lists this taxa as a valid species with distribution in Finland, Norway and Sweden, but notes that ”*Brauer’s species is misapplied for the species occurring in Fennoscandia.*” According to Botosaneanu (1974) *M. nigrum* (Brauer) is a synonym of *M. setiferum*, a more widespread European species. However, there are different opinions regarding whether there is one or two *Micrasema* species present in Fennoscandia in addition to *M. gelidum* McLachlan, 1876; a small, grey *M. nigrum* sensu auct. scand. and a larger, light brown *M. setiferum* (see note 99 in Andersen & Wiberg-Larsen 1987). Svensson & Tjeder (1975) illustrated *M. nigrum* sensu auct. scand. and both taxa are included in the atlas of European Trichoptera species (Malicky 1983), but Malicky (2005) keeps the

question open. Salokannel *et al.* (2011) list only *M. setiferum* from Finland and Juha Salokannel (pers. com.) informs us that preliminary DNA-barcoding does not indicate that there are marked differences between large and small individuals from Finland. In the present survey we also list the specimen as *M. setiferum*, but more specimens should be barcoded to resolve whether *M. setiferum* is a single, variable species or if we in addition have an unnamed northern *Micrasema* species.

LEPIDOSTOMATIDAE

Lepidostoma hirtum (Fabricius, 1775)

Material. FinLoc19, 25 June–9 July 2010, 3♂♂1♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 19♂♂; 9–24 July 2010, 9♂♂; 24 July–6 August 2010, 2♂♂2♀♀, Malaise trap; 24 July 2010, 1♂1♀, net. FinLoc32, 28 July 2010, 1♀, net. FinLoc75, 31 July 2010, 1♀, net. FinLoc81, 24 June–20 July 2010, 4♂♂3♀♀, Malaise trap.

Additional material. FN, Porsanger: Kistrand, 70.45546°N 25.22129°E, 13 July 1947, 1♀, net, leg. A. Tjønneland & N. Lønøy; FØ, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 30 September 1988, 1♂, net, leg. T. Andersen.

LIMNEPHILIDAE

Apatania auricula (Forsslund, 1930)

Material. FinLoc64, 3 September 2010, 1♀, net (det. J. Salokannel).

Remarks. The *Apatania zonella* (Zetterstedt, 1840) group of species contains predominantly parthenogenetic species of which several were listed for Norway by Andersen & Wiberg-Larsen (1987). However, when compiling the latest checklist of Norwegian Trichoptera species Solem & Andersen (1996) treated *A. zonella* in a wide sense omitting most of the other species in the group as we at that time deemed it necessary to re-examine available material to confirm identification before listing them. Recently, Salokannel *et al.* (2010) have re-examined the Finnish *Apatania* species using the DNA-barcoding method and found that they were grouped in four clades: *A. zonella* group *sensu lato*, *A. stigmatella* (Zetterstedt,

1840), *A. wallengreni* McLachlan, 1871 and *A. muliebris* McLachlan, 1866. The *A. zonella* group consists of the following four species: *A. auricula* (Forsslund, 1930), *A. dalecarlica* (Forsslund, 1934), *A. forsslundi* Tobias, 1981 and *A. hispida* (Forsslund, 1930) in addition to *A. zonella*, and the results from the DNA-barcoding support keeping all these taxa as separate, good species.

Apatania dalecarlica (Forsslund, 1942)

Material. FinLoc56, 17–26 July 2010, 1♀, Malaise trap (det. J. Salokannel).

Additional material. FØ, Sør-Varanger: Noatun, 69.16532°N 29.24579°E, 1 October 1988, 1♀, net, leg. T. Andersen.

Remarks. See comments above for *A. auricula*.

Apatania stigmatella (Zetterstedt, 1840)

Material. FinLoc08, 26 June–10 July 2010, 1♂; 23 July–7 August 2010, 3♂♂1♀; 7–24 August 2010, 1♂, Malaise trap; 23 July 2010, 1♂, net. FinLoc10, 29 July 2010, 20♂♂17♀♀, net. FinLoc15, 3 September 2010, 3♀♀, net. FinLoc18, 24 July 2010, 1♀; 31 August 2010, 4♂♂6♀♀, net. FinLoc19, 6–20 August 2010, 1♂, Malaise trap. FinLoc20, 24 July 2010, 1♀, net. FinLoc21, 6–20 August 2010, 4♂♂; 20–31 August 2010, 1♂3♀♀, Malaise trap; 31 August 2010, 1♂2♀♀, net. FinLoc27, 28 July 2010, 1♂, net. FinLoc30, 28 July 2010, 15♂♂13♀♀; 4 September 2010, 1♂, net. FinLoc32, 28 July 2010, 2♂♂, net. FinLoc36, 28 July 2010, 1♂, net. FinLoc39, 1 September 2010, 30♂♂10♀♀, net. FinLoc41, 1 September 2010, 1♂3♀♀, net. FinLoc56, 2–17 July 2010, 2♂♂2♀♀; 17–26 July 2010, 8♂♂12♀♀; 26 July–25 August 2010, 1♂, Malaise trap; 26 July 2010, 1♀, net. FinLoc60, 1–2 September 2010, 2♂♂; 2–3 September 2010, 1♂, light trap. FinLoc63, 3 September 2010, 1♂2♀♀, net. FinLoc67, 7 September 2010, 1♂, net. FinLoc75, 7 September 2010, 1♂4♀♀, net. FinLoc76, 7 September 2010, 1♂3♀♀, net. FinLoc78, 5 September 2010, 1♀, net. FinLoc81, 10–21 August 2010, 1♀, Malaise trap. FinLoc85, 6–7 September 2010, 306♂♂23♀♀; 7–8 September 2010, 52♂♂12♀♀, light trap. FinLoc85, 22 September 2010, 204♂♂46♀♀;

22 September–11 October 2010, 17♂♂3♀♀, light trap, leg. R.J.D.I. Voith. FinLoc92, 30 July 2010, 1♀, net. FinLoc94, 26 July 2010, 1♀, net. FinLoc96, 4 September 2010, 1♂, net. FinLoc98, 4 September 2010, 1♀, net. FinLoc102, 29 July 2010, 1♀, net.

Additional material. FV, Alta: Steinfossveien, 69.92976°N 23.26268°E, 30 June 1989, 1♂, net, leg. B.A. Sagvolden; Kvalsund: Repparfjordfjellet, Aidaroaivoe, 70.27716°N 24.10044°E, 12 July 1989, 2♂♂2♀♀, net, leg. A. Fjellberg; FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24 July 1987, 1♂1♀, net, leg. G.E.E. Søli; Kautokeino, 69.00281°N 23.04822°E, 3 July 1979, 1♀, net, leg. L. Greve; Karasjok: Våljohka, 69.69326°N 25.93166°E, 26 July 1987, 2♂, net, leg. G.E.E. Søli; FN, Vardø: Kiby, Sjøbuselva, 70.06213°N 29.89595°E, 27 July 1987, 2♂♂, net, leg. G.E.E. Søli; Komagelva, 70.24199°N 30.51738°E, 8 July 1989, 2♂♂2♀♀, net, leg. A. Fjellberg; Skallelv, 70.17064°N 30.31638°E, 27 July 1987, 1♂1♀, net, leg. G.E.E. Søli; Tana: Skiippagurra, 70.16443°N 28.23195°E, 26 July 1987, 1♂1♀, net, leg. G.E.E. Søli; Tana bru, 70.19896°N 28.20156°E, 4 July 1989, 2♂♂1♀, net, leg. A. Fjellberg; Tana bru, 70.19896°N 28.20156°E, 3 July 1989, 12♀♀, net, leg. B.A. Sagvolden; Vestertana, 70.42360°N 27.8688°E, 9 July 1989, 2♂♂2♀♀, net, leg. A. Fjellberg; FØ, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 7 July 1989, 1♀, net, leg. A. Fjellberg.

Apatania wallengreni McLachlan, 1871

Material. FinLoc01, 13 June 2010, 2♂♂4♀♀, net. FinLoc08, 11–26 June 2010, 4♂♂6♀♀; 26 June–10 July 2010, 4♀♀, Malaise trap. FinLoc18, 12 June 2010, 4♂♂1♀; 24 July 2010, 1♀, net. FinLoc19, 25 June–9 July 2010, 1♀, Malaise trap. FinLoc21, 12–25 June 2010, 14♂♂11♀♀; 25 June–9 July 2010, 5♂♂3♀♀, Malaise trap; 12 June 2010, 1♂2♀♀, net. FinLoc56, 15 June–2 July 2010, 3♂♂4♀♀; 2–17 July 2010, 3♀♀; 17–26 July 2010, 1♀, Malaise trap. FinLoc60, 14 June 2010, 1♂3♀♀, net. FinLoc69, 19 June 2010, 3♂♂4♀♀, net. FinLoc75, 19 June 2010, 5♂♂10♀♀, net.

Additional material. FV, Alta: Steinfossveien, 69.92976°N 23.26268°E, 30 June 1989,

16♀♀, net, leg. B.A. Sagvolden; Aavangen, 69.83820°N 23.39766°E, 29 June 1979, 12♀♀, net, leg. L. Greve; Kvalsund: Repparfjordelv, 70.44921°N 24.35276°E, 28 July 1975, 2♂♂2♀♀, net, leg. P. Undheim; FI, Kautokeino: Kautokeino, 69.00281°N 23.04822°E, 1 July 1989, 1♀, net, leg. B.A. Sagvolden; Siebe, 68.86608°N 23.14211°E, 24 June 1984, 1♀, net, leg. T.R. Nielsen; FØ, Sør-Varanger: Svanvik, Mellesmo, 69.45375°N 30.06198°E, 20 June–4 August 1986, 1♀, Malaise trap, leg. F. Midtgaard.

Apatania zonella (Zetterstedt, 1840)

Material. FinLoc08, 23 July–7 August 2010, 1♀, Malaise trap.

Annitella obscurata (McLachlan, 1876)

Material. FinLoc08, 30 August 2010, 3♂♂, net. FinLoc18, 31 August 2010, 4♂♂, net. FinLoc47, 3 September 2010, 3♂♂1♀, net. FinLoc48, 3 September 2010, 1♂, net. FinLoc76, 7 September 2010, 20♂♂1♀, net. FinLoc91, 7 September 2010, 8♂♂, net.

Additional material. FØ, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 30 September 1988, 2♂♂1♀, net, leg. T. Andersen; Noatun, 69.16532°N 29.24579°E, 1 October 1988, 1♂1♀, net, leg. T. Andersen.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously only recorded from the southern parts of the country north to Nordland (Solem & Andersen 1996).

Chaetopteryx sahlbergi McLachlan, 1876

Material. FinLoc18, 31 August 2010, 8♂♂, net. FinLoc20, 31 August 2010, 1♂, net. FinLoc21, 31 August 2010, 4♂♂, net. FinLoc24, 31 August 2010, 1♂, net. FinLoc48, 3 September 2010, 1♂, net. FinLoc63, 3 September 2010, 4♂♂, net. FinLoc64, 3 September 2010, 1♂, net. FinLoc69, 7 September 2010, 1♂, net. FinLoc75, 7 September 2010, 6♂♂3♀♀, net. FinLoc76, 7 September 2010, 8♂♂1♀, net. FinLoc105, 3 September 2010, 1♂, net.

Additional material. FØ, Sør-Varanger: Noatun, 69.16532°N 29.24579°E, 1 October 1988, 5♂♂5♀♀, net, leg. T. Andersen.

***Chaetopteryx villosa* (Fabricius, 1798)**

Material. FinLoc03, 1 September 2010, 1♂, net. FinLoc56, 25 August–3 September 2010, 1♂, Malaise trap. FinLoc96, 4 September 2010, 1♂, net.

Additional material. FØ, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 30 September 1988, 1♀, net, leg. T. Andersen.

***Chilostigma sieboldi* McLachlan, 1876**

Material. FinLoc85, 22 September 2010, 1♀; 22 September–11 October 2010, 8♂♂4♀♀, light trap, leg. R.J.D.I. Voith.

***Anabolia concentrica* (Zetterstedt, 1840)**

Material. FinLoc47, 3 September 2010, 1♀, net. FinLoc65, 10–21 August 2010, 1♂, Malaise trap. FinLoc85, 5–6 September 2010, 1♂; 6–7 September 2010, 57♂♂; 7–8 September 2010, 1♂, light trap. FinLoc85, 10 August 2010, 3♂♂; 22 September 2010, 14♂♂; 22 September–11 October 2010, 4♂♂, light trap, leg. R.J.D.I. Voith. FinLoc92, 30 July 2010, 1♂, net.

***Arctopora trimaculata* (Zetterstedt, 1840)**

Material. FinLoc19, 25 June–9 July, 2♂♂1♀; 9–24 July 2010, 34♂♂14♀♀; 24 July–6 August 2010, 46♂♂35♀♀; 6–20 August 2010, 6♂♂6♀♀; 20–31 August 2010, 1♀, Malaise trap; 24 July 2010, 2♀♀; 31 August 2010, 1♀, net. FinLoc21, 25 June–9 July, 1♂; 9–24 July 2010, 3♂♂4♀♀; 24 July–6 August 2010, 7♂♂8♀♀; 6–20 August 2010, 1♀, Malaise trap. FinLoc47, 27 July 2010, 3♀♀; 3 September 2010, 3♀♀, net. FinLoc55, 26 July 2010, 2♂♂, net. FinLoc68, 31 July 2010, 1♂, net.

Additional material. FI, Kautokeino: Masi, 69.44346°N 23.66540°E, 1 July 1989, 4♀♀, net, leg. B.A. Sagvolden; FN, Vadsø: Vadsø, 70.08121°N 29.74332°E, 9–10 July 1983, 2♀♀, net, leg. T.R. Nielsen; FØ, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 7 August 1996, 4♀♀, net, leg. J. Skartveit.

***Asynarchus contumax* McLachlan, 1880**

Material. FinLoc21, 25 June–9 July 2010, 1♂; 9–24 July 2010, 1♂, Malaise trap.

Additional material. FI, Kautokeino:

Låhpoluoppal, 69.20953°N 23.76158°E, 2 July 1989, 1♂, net, leg. B.A. Sagvolden; Masi, 69.44346°N 23.66540°E, 1 July 1989, 1♀, net, leg. B.A. Sagvolden.

***Asynarchus impar* (McLachlan, 1880)**

Material. FinLoc19, 25 June–9 July 2010, 38♂♂2♀♀; 9–24 July 2010, 95♂♂2♀♀; 24 July–6 August 2010, 8♂♂, Malaise trap. FinLoc21, 24 July–6 August 2010, 1♂, Malaise trap.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24–25 July 1987, 1♂1♀, Malaise trap, leg. G.E.E. Søli; Breibuktnes, 69.04284°N 23.09658°E, 1 July 1989, 1♂6♀♀, net, leg. B.A. Sagvolden; Kautokeino, 69.00281°N 23.04822°E, 1 July 1989, 2♂♂1♀, net, leg. B.A. Sagvolden; Suolovuopmi, 69.58218°N 23.53135°E, 24 June 1984, 1♀, net, leg. T.R. Nielsen.

***Asynarchus lapponicus* (Zetterstedt, 1840)**

Material. FinLoc08, 23 July–7 August 2010, 1♀; 24–30 August 2010, 3♂♂, Malaise trap. FinLoc19, 6–20 August 2010, 1♂, Malaise trap. FinLoc65, 21 August–6 September 2010, 4♂♂, Malaise trap. FinLoc85, 6–7 September 2010, 2♂♂; 7–8 September 2010, 1♂, light trap. FinLoc85, 22 September 2010, 7♂♂; 22 September–11 October 2010, 1♂, light trap, leg. R.J.D.I. Voith.

Additional material. FN, Vardø: Persfjord, 70.41994°N 30.79179°E, 8 July 1989, 1♂3♀♀, net, leg. A. Fjellberg.

***Asynarchus thedenii* (Wallengren, 1879)**

Material. FinLoc08, 23 July–7 August 2010, 1♂; 7–24 August 2010, 9♂♂, Malaise trap; 30 August 2010, 1♂, net. FinLoc11, 3 September 2010, 3♂♂, net. FinLoc12, 3 August 2010, 1♀, net. FinLoc17, 31 August 2010, 1♂, net. FinLoc19, 24 July–6 August 2010, 1♂; 20–31 August 2010, 1♂, Malaise trap. FinLoc24, 31 August 2010, 1♂, net. FinLoc48, 3 September 2010, 18♂♂5♀♀, net; 3 September 2010, 37♂♂3♀♀, yellow tray. FinLoc63, 3 September 2010, 1♂, net. FinLoc65, 10–21 August 2010, 2♂♂, Malaise trap. FinLoc69, 7 September 2010, 2♂♂, net. FinLoc71, 7 September 2010,

1♂1♀, net. FinLoc78, 5 September 2010, 1♂, net. FinLoc82, 7 September 2010, 1♂, net. FinLoc83, 5 September 2010, 7♂♂5♀♀, net. FinLoc85, 6–7 September 2010, 2♂♂, light trap. FinLoc85, 29 September 2010, 1♂, light trap, leg. R.J.D.I. Voith. FinLoc91, 7 September 2010, 2♂♂, net. FinLoc92, 7 September 2010, 1♂, net; 7 September 2010, 3♂♂, white tray.

Remarks. The species is listed as vulnerable (VU) in the 2010 Norwegian Red List for Species (Kjørstad *et al.* 2010) based on a single Norwegian record by Tobias & Tobias (1971) from Gjøkvann in Sør-Varanger.

Colpotauius incisus (Curtis, 1834)

Material. FinLoc08, 10–23 July 2010, 1♂, Malaise trap. FinLoc69, 30 July 2010, 1♀, net. FinLoc84, 1 August 2010, 1♀, net. FinLoc106, 29 July 2010, 1♀, net.

Additional material. FN, Tana: Skiippagurra, 70.16443°N 28.23195°E, 26 July 1987, 1♀, net, leg. G.E.E. Søli; Tana bru, 70.19896°N 28.20156°E, 4 July 1989, 1♂1♀, net, leg. A. Fjellberg; FØ, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 7 July 1989, 1♂1♀, net, leg. A. Fjellberg; Neiden, 69.70212°N 29.38778°E, 7 August 1996, 1♂, net, leg. J. Skartveit; Noatun, 69.16532°N 29.24579°E, 5 July 1989, 1♂1♀, net, leg. A. Fjellberg. Svanvik; Mellesmo, 69.45375°N 30.06198°E, 20 June–4 August 1986, 1♀, Malaise trap, leg. F. Midtgaard; Svanvik, Svanhovd, 69.45644°N 30.05056°E, 4 August–1 September 1986, 3♂♂, Malaise trap, leg. F. Midtgaard.

Grammotaulius signatipennis McLachlan, 1876

Material. FinLoc19, 6–20 August 2010, 1♀, Malaise trap.

Limnephilus algosus (McLachlan, 1868)

Material. FinLoc08, 11–26 June 2010, 3♂♂3♀♀; 26 June–10 July 2010, 57♂♂13♀♀, Malaise trap. FinLoc19, 12–25 June 2010, 1♂; 25 June–9 July 2010, 4♂♂1♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 1♀, Malaise trap. FinLoc69, 19 June 2010, 11♂♂, net. FinLoc75, 19 June 2010, 1♂, net. FinLoc81, 19–24 June 2010, 1♂; 24 June–20 July 2010, 1♂, Malaise trap. FinLoc92, 19 June 2010, 12♂♂, net.

Additional material. FI, Kautokeino: Siebe, 68.86608°N 23.14211°E, 24 June 1984, 1♂, net, leg. T.R. Nielsen; FN, Gamvik: Mehamn, Vedvikneset, 71.04556°N 27.86177°E, 30 July 1986, 2♂♂, net, leg. G.E.E. Søli; Berlevåg: Berlevåg, 70.85141°N 29.09276°E, 5–6 July 1986, 6♂♂, net, leg. G.E.E. Søli.

Limnephilus borealis (Zetterstedt, 1840)

Material. FinLoc03, 1 September 2010, 1♂, net. FinLoc05, 30–31 August 2010, 41♂♂, light trap. FinLoc07, 30 August 2010, 6♀♀, net. FinLoc08, 23 July–7 August 2010, 1♂1♀; 7–24 August 2010, 2♂♂2♀♀; 24–30 August 2010, 1♂, Malaise trap. FinLoc11, 3 September 2010, 1♂1♀, net. FinLoc13, 3 September 2010, 3♂♂4♀♀, net. FinLoc17, 31 August 2010, 5♀♀, net. FinLoc19, 6–20 August 2010, 2♂♂; 20–31 August 2010, 2♂♂, Malaise trap. FinLoc24, 31 August 2010, 4♀♀, net. FinLoc28, 4 September 2010, 4♀♀, net. FinLoc29, 4 September 2010, 3♀♀, net. FinLoc33, 4 September 2010, 5♂♂4♀♀, net. FinLoc37, 1 September 2010, 2♂♂6♀♀, net. FinLoc41, 1 September 2010, 2♂♂3♀♀, net. FinLoc51, 4 September 2010, 2♀♀, net. FinLoc53, 26 July 2010, 1♀, net. FinLoc56, 26 July–25 August 2010, 1♀; 25 August–3 September 2010, 1♀, Malaise trap. FinLoc59, 2 September 2010, 2♂♂, net. FinLoc60, 26–28 July 2010, 1♂, net; 1–2 September 2010, 8♂♂; 2–3 September 2010, 2♂♂, light trap. FinLoc62, 2 September 2010, 2♀♀, net. FinLoc65, 30 July–10 August 2010, 1♂2♀♀; 21 August–6 September 2010, 3♂♂3♀♀, Malaise trap; 31 July 2010, 2♀♀, net. FinLoc67, 30 July 2010, 1♀, net. FinLoc68, 31 July 2010, 1♂; 7 September 2010, 2♀♀, net. FinLoc69, 30 July 2010, 1♀; 7 September 2010, 4♀♀, net. FinLoc71, 7 September 2010, 4♀♀, net. FinLoc74, 7 September 2010, 3♀♀, net. FinLoc76, 7 September 2010, 2♂♂1♀, net. FinLoc78, 5 September 2010, 1♂1♀, net. FinLoc79, 5 September 2010, 1♀, net. FinLoc82, 7 September 2010, 1♀, net. FinLoc85, 6–7 September 2010, 352♂♂57♀♀; 7–8 September 2010, 38♂♂6♀♀, light trap. FinLoc85, 10 August 2010, 3♂♂; 22 September 2010, 121♂♂24♀♀, light trap, leg. R.J.D.I. Voith. FinLoc91, 7 September 2010, 1♀, net. FinLoc92, 7 September 2010, 1♂, white tray.

FinLoc96, 4 September 2010, 1♀, net.

***Limnephilus coenosus* Curtis, 1834**

Material. FinLoc03, 25 July 2010, 1♀, net. FinLoc05, 30–31 August 2010, 1♂, light trap. FinLoc32, 28 July 2010, 1♂, net. FinLoc65, 10–21 August 2010, 1♂, Malaise trap; 30 July 2010, 1♀, net. FinLoc72, 7 September 2010, 2♀♀, net. FinLoc85, 6–7 September 2010, 19♂♂; 7–8 September 2010, 4♂♂, light trap. FinLoc85, 10 August 2010, 1♂2♀♀; 22 September 2010, 47♂♂2♀♀; 22 September–11 October 2010, 19♂♂, light trap, leg. R.J.D.I. Voith. FinLoc102, 29 July 2010, 1♂1♀, net. FinLoc105, 29 July 2010, 2♂♂1♀, net.

Additional material. FV, Nordkapp: Kjølvik, 71.00234°N 26.11264°E, 23–26 July 1947, 1♂, net, leg. A. Tjønneland & N. Lønøy; FI, Kautokeino: Guhkesjávri, 69.13099°N 22.70404°E, 25 July 1987, 1♀, net, leg. G.E.E. Søli; FN, Berlevåg: Gednje, 70.62044°N 29.13446°E, 4 July 1989, 1♂, net, leg. B.A. Sagvolden; FØ, Sør-Varanger: Ellenvatnet, 69.11823°N 28.90898°E, 1 August 1996, 2♀♀, net, leg. J. Skartveit.

***Limnephilus decipiens* (Kolenati, 1848)**

Material. FinLoc85, 6–7 September 2010, 71♂♂16♀♀; 7–8 September 2010, 37♂♂1♀, light trap. FinLoc85, 22 September 2010, 192♂♂52♀♀; 22 September–11 October 2010, 21♂♂6♀♀, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously collected in the south-eastern parts of the country north to Oppland and Hedmark (Solem & Andersen 1996). In Finland the species is distributed in the southern and central parts of the country and has recently been taken in Lapponia inarenensis (Li) (see Salokannel *et al.* 2011).

***Limnephilus diphyses* McLachlan, 1880**

Material. FinLoc85, 22 September 2010, 1♂, light trap, leg. R.J.D.I. Voith.

Remarks. The only previous record of the species from Norway is from Sør-Varanger (Tobias 1976a) and the species is listed as vulnerable (VU) in the 2010 Norwegian Red List for Species

(Kjærstad *et al.* 2010). In Finland it is recorded from most provinces including Lapponia inarenensis (Li) and Lapponia enontekiensis (Le) (Salokannel *et al.* 2011).

***Limnephilus dispar* McLachlan, 1875**

Material. FinLoc19, 9–24 July 2010, 1♀, Malaise trap. FinLoc47, 16 June 2010, 8♂♂1♀, net.

Additional material. FI, Kautokeino: Guorbajavri, 69.22324°N 22.56366°E, 25 July 1987, 11♂♂1♀, net, leg. G.E.E. Søli; Siebe, 68.86608°N 23.14211°E, 24 June 1984, 2♂♂, net, leg. T.R. Nielsen; Suolovuopmi, 69.58218°N 23.53135°E, 24 June 1984, 1♀, net, leg. T.R. Nielsen.

***Limnephilus externus* Hagen, 1861**

Material. FinLoc60, 1–2 September 2010, 1♂, light trap. FinLoc85, 6–7 September 2010, 18♂♂3♀♀; 7–8 September 2010, 5♂♂1♀, light trap. FinLoc85, 22 September 2010, 47♂♂8♀♀; 22 September–11 October 2010, 3♂♂, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). It was reported as new to Norway from Vestfold by Andersen (1975) and was later reported from Østfold (Andersen *et al.* 1993). One specimen from Klæbu, Sør-Trøndelag is housed in the collection at the Museum of Natural History and Archaeology, NTNU-Trondheim and recent records from Akershus and Hedmark are displayed in Artskart (2012). In Finland it is distributed north to Lapponia inarenensis (Li) and Lapponia enontekiensis (Le) (Salokannel *et al.* 2011).

***Limnephilus extricatus* McLachlan, 1865**

Material. FinLoc07, 30 August 2010, 1♂, net. FinLoc08, 23 July–7 August 2010, 2♂♂4♀♀; 7–24 August 2010, 1♂, Malaise trap. FinLoc32, 28 July 2010, 1♂, net. FinLoc81, 24 June–20 July 2010, 1♀, Malaise trap. FinLoc85, 10 August 2010, 2♂♂1♀, light trap, leg. R.J.D.I. Voith. FinLoc106, 29 July 2010, 1♀, net.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24–25 July 1987, 1♂, Malaise trap, leg. G.E.E. Søli.

***Limnephilus femoralis* Kirby, 1837**

Material. FinLoc32, 28 July 2010, 1♀, net (det. J. Salokannel). FinLoc 53, 26 July 2010, 1♀, net (det. J. Salokannel).

***Limnephilus femoratus* (Zetterstedt, 1840)**

Material. FinLoc07, 30 August 2010, 4♂♂2♀♀, net. FinLoc08, 23 July–7 August 2010, 104♂♂59♀♀; 7–24 August 2010, 244♂♂96♀♀; 24–30 August 2010, 60♂♂14♀♀, Malaise trap; 30 August 2010, 24♂♂22♀♀, net. FinLoc12, 3 August 2010, 2♂♂5♀♀, net. FinLoc14, 3 September 2010, 6♂♂15♀♀, net. FinLoc19, 9–24 July 2010, 40♂♂17♀♀; 24 July–6 August 2010, 87♂♂120♀♀; 6–20 August 2010, 8♂♂23♀♀; 20–31 August 2010, 1♂1♀, Malaise trap; 24 July 2010, 2♂♂; 31 August 2010, 1♀, net. FinLoc21, 24 July–6 August 2010, 3♂♂1♀; 6–20 August 2010, 1♂1♀; 20–31 August 2010, 1♀, Malaise trap; 31 August 2010, 2♀♀, net. FinLoc24, 31 August 2010, 8♂♂7♀♀, net. FinLoc26, 3 September 2010, 1♂, net. FinLoc29, 28 July 2010, 1♂; 4 September 2010, 6♂♂8♀♀, net. FinLoc32, 4 September 2010, 2♀♀, net. FinLoc47, 27 July 2010, 1♂; 3 September 2010, 2♀♀, net. FinLoc48, 3 September 2010, 6♂♂8♀♀, net. FinLoc55, 26 July 2010, 1♀, net. FinLoc59, 2 September 2010, 1♂, net. FinLoc67, 30 July 2010, 1♂; 7 September 2010, 3♂♂, net. FinLoc69, 30 July 2010, 2♂♂1♀, net. FinLoc76, 7 September 2010, 1♂, net. FinLoc78, 5 September 2010, 4♂♂1♀, net. FinLoc92, 7 September 2010, 1♀, net. FinLoc100, 3 September 2010, 1♀, net. FinLoc105, 29 July 2010, 1♂, net.

Additional material. FØ, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 2♂♂, net, leg. J. Skartveit; Neiden, 69.70212°N 29.38778°E, 7 August 1996, 3♀♀, net, leg. J. Skartveit.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Nordland (Solem & Andersen 1996).

***Limnephilus fenestratus* (Zetterstedt, 1840)**

Material. FinLoc07, 30 August 2010, 1♀, net. FinLoc53, 2 September 2010, 1♂1♀, net.

FinLoc62, 2 September 2010, 1♂2♀♀, net. FinLoc65, 21 August–6 September 2010, 1♂, Malaise trap. FinLoc71, 7 September 2010, 1♂, net. FinLoc85, 6–7 September 2010, 10♂♂, light trap. FinLoc85, 22 September 2010, 10♂♂1♀, light trap, leg. R.J.D.I. Voith.

***Limnephilus fuscicornis* Rambur, 1842**

Material. FinLoc08, 26 June–10 July 2010, 1♂2♀♀; 10–23 July 2010, 1♂, Malaise trap. FinLoc19, 25 June–9 July 2010, 75♂♂4♀♀; 9–24 July 2010, 6♂♂, Malaise trap. FinLoc21, 25 June–9 July 2010, 129♂♂5♀♀; 9–24 July 2010, 25♂♂5♀♀; 24 July–6 August 2010, 1♀, Malaise trap. FinLoc74, 7 September 2010, 1♀, net. FinLoc81, 24 June–20 July 2010, 4♂♂; 20–30 July 2010, 1♂1♀, Malaise trap.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 1♀, net, leg. A. Fjellberg.

***Limnephilus griseus* (Linnaeus, 1758)**

Material. FinLoc07, 30 August 2010, 1♂1♀, net. FinLoc37, 1 September 2010, 1♀, net. FinLoc38, 1 September 2010, 1♂, net.

***Limnephilus nigriceps* (Zetterstedt, 1840)**

Material. FinLoc04, 1 September 2010, 2♂♂, net. FinLoc07, 30 August 2010, 40♂♂10♀♀, net. FinLoc08, 26 June–10 July, 3♀♀, 10–23 July 2010, 1♀; 24–30 August 2010, 2♂♂1♀, Malaise trap; 30 August 2010, 5♂♂, net. FinLoc11, 3 September 2010, 50♂♂10♀♀, net. FinLoc12, 3 August 2010, 6♂♂, net. FinLoc13, 3 September 2010, 10♂♂6♀♀, net. FinLoc14, 3 September 2010, 7♂♂8♀♀, net. FinLoc18, 31 August 2010, 1♂, net. FinLoc19, 6–20 August 2010, 1♂; 20–31 August 2010, 1♂2♀♀, Malaise trap; 31 August 2010, 1♂1♀, net. FinLoc20, 31 August 2010, 1♂3♀♀, net. FinLoc21, 31 August 2010, 9♂♂4♀♀, net. FinLoc24, 31 August 2010, 33♂♂9♀♀, net. FinLoc29, 4 September 2010, 64♂♂5♀♀, net. FinLoc32, 4 September 2010, 2♀♀, net. FinLoc37, 1 September 2010, 1♂, net. FinLoc48, 3 September 2010, 17♂♂, net. FinLoc50, 4 September 2010, 2♂♂1♀, net. FinLoc55, 2 September 2010, 4♂♂4♀♀, net. FinLoc57, 1 September 2010, 2♂♂, net.

FinLoc59, 2 September 2010, 23♂♂19♀♀, net. FinLoc62, 2 September 2010, 11♂♂5♀♀, net. FinLoc65, 21 August–6 September 2010, 5♂♂4♀♀, Malaise trap; 8 September 2010, 1♂, net. FinLoc67, 7 September 2010, 2♂♂4♀♀, net. FinLoc68, 7 September 2010, 2♂♂4♀♀, net. FinLoc69, 7 September 2010, 10♂♂5♀♀, net. FinLoc70, 5 September 2010, 5♂♂, net. FinLoc71, 7 September 2010, 31♂♂36♀♀, net. FinLoc72, 7 September 2010, 5♂♂2♀♀, net. FinLoc73, 7 September 2010, 5♂♂3♀♀, net. FinLoc74, 7 September 2010, 63♂♂34♀♀, net. FinLoc75, 7 September 2010, 6♂♂, net. FinLoc76, 7 September 2010, 9♂♂6♀♀, net. FinLoc78, 5 September 2010, 29♂♂5♀♀, net. FinLoc79, 5 September 2010, 5♂♂6♀♀; 8 September 2010, 2♂♂1♀, net. FinLoc82, 7 September 2010, 24♂♂10♀♀, net. FinLoc83, 5 September 2010, 5♂♂1♀, net. FinLoc85, 6–7 September 2010, 3♂♂1♀, light trap. FinLoc85, 22 September 2010, 2♂♂1♀, light trap, leg. R.J.D.I. Voith. FinLoc88, 5 September 2010, 35♂♂12♀♀, net. FinLoc91, 7 September 2010, 27♂♂2♀♀, net. FinLoc92, 7 September 2010, 15♂♂6♀♀, net. FinLoc96, 4 September 2010, 23♂♂2♀♀, net. FinLoc100, 3 September 2010, 6♂♂, net. FinLoc105, 5 September 2010, 3♂♂, net.

***Limnephilus pantodapus* McLachlan, 1875**

Material. FinLoc08, 26 June–10 July 2010, 11♂♂13♀♀; 10–23 July 2010, 1♂1♀; 23 July–7 August 2010, 1♀, Malaise trap. FinLoc19, 12–25 June 2010, 35♂♂13♀♀; 25 June–9 July 2010, 66♂♂34♀♀; 9–24 July 2010, 2♂♂4♀♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 7♂♂4♀♀; 9–24 July 2010, 1♀, Malaise trap. FinLoc65, 19–24 June 2010, 5♂♂1♀♀; 24 June–20 July 2010, 1♂6♀♀, Malaise trap; 19 June 2010, 1♂, net. FinLoc89, 20 June 2010, 1♂, net.

Additional material. **FV**, Alta: Steinfossveien, 69.92976°N 23.26268°E, 30 June 1989, 1♀, net, leg. B.A. Sagvolden; **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24–25 July 1987, 1♀, Malaise trap, leg. G.E.E. Søli; Avzi, 69.01901°N 23.23525°E, 2 July 1989, 1♀, net, leg. A. Fjellberg; Breibuktnes, 69.04284°N 23.09658°E, 1 July 1989, 3♂♂1♀, net, leg. B.A. Sagvolden; Kautokeino, 69.00281°N 23.04822°E,

1 July 1989, 1♀, net, leg. B.A. Sagvolden; **FN**, Tana: Mannsholmen, 70.14019°N 28.17280°E, 3 July 1989, 1♂, net, leg. B. Sagvolden; **FØ**, Sør-Varanger: Neiden, 69.70212°N 29.38778°E, 7 August 1996, 1♀, net, leg. J. Skartveit; Tjærebukta, 69.19813°N 29.15814°E, 5 July 1974, 1♂, net, leg. A. Fjellberg; Vaggatem, 69.21411°N 29.15452°E, 5 July 1974, 1♂, net, leg. A. Fjellberg.

***Limnephilus picturatus* McLachlan, 1875**

Material. FinLoc04, 1 September 2010, 2♂♂1♀, net. FinLoc08, 30 August 2010, 1♀, net. FinLoc19, 6–20 August 2010, 1♀, Malaise trap; 31 August 2010, 1♂1♀, net. FinLoc47, 3 September 2010, 1♂, net.

***Limnephilus politus* McLachlan, 1865**

Material. FinLoc 69, 7 September 2010, 1♀, net. FinLoc 74, 6 September 2010, 7♀♀, net (det. J. Salokannel). FinLoc 92, 7 September 2010, 1♀, net.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is distributed in the southeastern parts of the country and there is one old (1948) record from Nordland (Solem & Andersen 1996, Artskart 2012). In Finland the species is distributed in the southern and central parts of the country and has recently been taken in Lapponia inarensis (Li) (Salokannel *et al.* 2011).

***Limnephilus rhombicus* (Linnaeus, 1758)**

Material. FinLoc08, 10–23 July 2010, 1♀; 23 July–7 August 2010, 1♀, Malaise trap. FinLoc19, 24 July–6 August 2010, 3♀♀, Malaise trap. FinLoc21, 25 June–9 July 2010, 2♂♂1♀; 9–24 July 2010, 1♀; 24 July–6 August 2010, 2♀♀, Malaise trap. FinLoc47, 27 July 2010, 1♀, net. FinLoc65, 20–30 July 2010, 1♀; 10–21 August 2010, 2♀♀, Malaise trap. FinLoc74, 7 September 2010, 1♀, net. FinLoc81, 24 June–20 July 2010, 1♀; 20–30 July 2010, 1♀, Malaise trap. FinLoc85, 10 August 2010, 1♀; 22 September 2010, 38♂♂5♀♀; 22 September–11 October 2010, light trap, leg. R.J.D.I. Voith. FinLoc92, 30 July 2010, 1♀, net.

Additional material. **FI**, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 1♀, net,

leg. A. Fjellberg; Kautokeino, 69.00281°N 23.04822°E, 4 July 1979, 1♂, net, leg. L. Greve; FØ, Sør-Varanger: Sortbrysttjern, 69.15848°N 28.97891°E, 5 July 1974, 2♂♂, net, leg. A. Fjellberg.

Limnephilus sericeus (Say, 1824)

Material. FinLoc05, 30–31 August 2010, 1♂, light trap. FinLoc07, 30 August 2010, 1♂1♀, net. FinLoc08, 7–24 August 2010, 2♂♂5♀♀; 24–30 August 2010, 3♀♀, Malaise trap. FinLoc14, 3 September 2010, 1♀, net. FinLoc19, 31 August 2010, 1♂, net. FinLoc21, 24 July–6 August 2010, 2♀♀; 6–20 August 2010, 2♂♂, Malaise trap. FinLoc47, 3 September 2010, 1♂6♀♀, net. FinLoc61, 4 September 2010, 1♂, net. FinLoc64, 3 September 2010, 1♂1♀, net. FinLoc68, 31 July 2010, 1♀; 7 September 2010, 1♀, net. FinLoc74, 7 September 2010, 2♂♂1♀, net. FinLoc82, 7 September 2010, 1♂, net. FinLoc85, 6–7 September 2010, 104♂♂1♀; 7–8 September 2010, 7♂♂, light trap. FinLoc85, 10 August 2010, 4♂♂; 22 September 2010, 112♂♂40♀♀; 22 September–11 October 2010, 11♂♂10♀♀, light trap, leg. R.J.D.I. Voith.

Additional material. FV, Alta: Gargia, 69.80596°N 23.50197°E, 2 August 1982, 1♂1♀, net, leg. L. Greve; FI, Kautokeino: Kautokeino, 69.00281°N 23.04822°E, 1 July 1989, 1♀, net, leg. B.A. Sagvolden; FN, Tana: Vestertana, 70.42360°N 27.8688°E, 9 July 1989, 1♀, net, leg. A. Fjellberg.

Limnephilus sparsus Curtis, 1834

Material. FinLoc85, 22 September 2010, 1♂; 22 September–11 October 2010, 5♂♂, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). However, two older records (1924) from Alta and Porsanger in Finnmark are reported in Artskart (2012).

Limnephilus stigma Curtis, 1834

Material. FinLoc05, 30–31 August 2010, 1♂, light trap. FinLoc07, 30 August 2010, 1♂, net. FinLoc56, 25 August–3 September 2010, 1♀, Malaise trap. FinLoc60, 2–3 September 2010, 1♂, light trap. FinLoc85, 6–7 September 2010, 2♂♂;

7–8 September 2010, 1♂, light trap. FinLoc85, 10 August 2010, 2♂♂1♀; 22 September 2010, 5♂♂; 22 September–11 October 2010, 1♂, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Troms (Solem & Andersen 1996).

Limnephilus subnitidus McLachlan, 1875

Material. FinLoc07, 30 August 2010, 1♂, net. FinLoc75, 7 September 2010, 2♂♂, net. FinLoc85, 29 September 2010, 6♂♂, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). However, it was included in the 2006 Norwegian Red List based on a few records including one from Finnmark (Aagaard *et al.* 2006).

Limnephilus vittatus (Fabricius, 1798)

Material. FinLoc05, 30–31 August 2010, 1♂, light trap. FinLoc50, 4 September 2010, 1♂1♀, net. FinLoc85, 7–8 September 2010, 1♂, light trap. FinLoc85, 22 September 2010, 7♂♂1♀; 22 September–11 October 2010, 3♂♂, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). However, there is one recent record of the species from Porsanger in Finnmark (Artskart 2012).

Nemotaulius punctatolineatus (Retzius, 1783)

Material. FinLoc19, 25 June–9 July 2010, 2♂♂5♀♀; 9–24 July 2010, 1♀; 24 July–6 August 2010, 1♂, Malaise trap. FinLoc21, 9–24 July 2010, 1♀, Malaise trap. FinLoc55, 15 June 2010, 1♂, net.

Phacopteryx brevipennis (Curtis, 1834)

Material. FinLoc08, 23 July–7 August 2010, 3♂♂; 7–24 August 2010, 10♂♂3♀♀; 24–30 August 2010, 1♂3♀♀, Malaise trap; 30 August 2010, 1♂, net. FinLoc21, 6–20 August 2010, 1♂, Malaise trap. FinLoc65, 30 July–10 August 2010, 1♀, Malaise trap. FinLoc 81, 30 July–10 August 2010, 1♂, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Troms (Solem & Andersen 1996).

***Rhadicleptus alpestris* (Kolenati, 1848)**

Material. FinLoc05, 30–31 August 2010, 1♂, light trap. FinLoc56, 25 August–3 September 2010, 1♂, Malaise trap. FinLoc85, 6–7 September 2010, 1♂; 7–8 September 2010, 2♂♂, light trap. FinLoc85, 6–7 September 2010, 1♂; 7–8 September 2010, 2♂♂, light trap. FinLoc85, 22 September 2010, 3♂♂; 22 September–11 October 2010, 4♂♂, light trap, leg. R.J.D.I. Voith.

Additional material. FØ, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 1♀, net, leg. J. Skartveit; Ellenvatnet, 69.11823°N 28.90898°E, 1 August 1996, 1♀, net, leg. J. Skartveit; Sortbrysttjern, 69.15848°N 28.97891°E, 5 July 1974, 1♂, net, leg. A. Fjellberg.

***Halesus digitatus* (Schrank, 1781)**

Material. FinLoc05, 7–24 August 2010, 3♂♂3♀♀; 24–30 August 2010, 4♀♀, Malaise trap; 30–31 August 2010, 42♂♂5♀♀, light trap. FinLoc60, 1–2 September 2010, 1♂; 2–3 September 2010, 1♂1♀, light trap. FinLoc85, 6–7 September 2010, 8♂♂; 7–8 September 2010, 2♂♂, light trap. FinLoc85, 22 September 2010, 11♂♂; 22 September–11 October 2010, 12♂♂, light trap, leg. R.J.D.I. Voith.

***Halesus radiatus* (Curtis, 1834)**

Material. FinLoc05, 30–31 August 2010, 2♂♂, light trap. FinLoc48, 3 September 2010, 1♂, yellow tray. FinLoc85, 7–8 September 2010, 1♂, light trap. FinLoc85, 22 September 2010, 4♂♂; 22 September–11 October 2010, 2♂♂, light trap, leg. R.J.D.I. Voith. FinLoc105, 3 September 2010, 2♂♂, net.

***Halesus tessellatus* (Rambur, 1842)**

Material. FinLoc81, 30 July–10 August 2010, 1♂; 10–21 August 2010, 1♂, Malaise trap. FinLoc85, 6–7 September 2010, 5♂♂1♀; 7–8 September 2010, 5♂♂, light trap; 5 September 2010, 1♂, in spider web. FinLoc85, 29 September

2010, 11♂♂, light trap, leg. R.J.D.I. Voith.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Nordland (Solem & Andersen 1996).

***Hydatophylax infumatus* (McLachlan, 1865)**

Material. FinLoc08, 26 June–10 July 2010, 4♂♂2♀♀; 10–23 July 2010, 1♂3♀♀, Malaise trap.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24 July 1987, 1♀, net, leg. G.E.E. Søli; Karasjok: Karasjok, 69.47025°N 25.50783°E, 15 July 1947, 2♂♂, net, leg. A. Tjønneland & N. Lønøy; FN, Vardø: Kiby, Sjøbuselva, 70.06213°N 29.89595°E, 27 July 1987, 1♀, net, leg. G.E.E. Søli.

***Potamophylax cingulatus* (Stephens, 1837)**

Material. FinLoc03, 25 July 2010, 1♂, net. FinLoc05, 26 June–10 July 2010, 1♀; 10–23 July 2010, 6♂♂; 23 July–7 August 2010, 3♂♂4♀♀, Malaise trap. FinLoc08, 23 July 2010, 2♀♀, net. FinLoc06, 25 July 2010, 1♂, net. FinLoc10, 29 July 2010, 1♂1♀, net. FinLoc18, 24 July 2010, 1♀, net. FinLoc30, 28 July 2010, 1♀, net. FinLoc42, 26 July–25 August 2010, 1♂, Malaise trap; 26 July 2010, 1♂, net. FinLoc56, 17–26 July 2010, 1♂, Malaise trap. FinLoc85, 6–7 September 2010, 1♂, light trap. FinLoc85, 10 August 2010, 7♂♂1♀; 22 September 2010, 2♂♂, light trap, leg. R.J.D.I. Voith. FinLoc92, 30 July 2010, 1♂1♀, net. FinLoc94, 26 July 2010, 1♂, net. FinLoc102, 29 July 2010, 1♂, net. FinLoc106, 29 July 2010, 1♀, net.

Additional material. FN, Vardø: Kiby, Sjøbuselva, 70.06213°N 29.89595°E, 27 July 1987, 2♂♂, net, leg. G.E.E. Søli.

***Potamophylax latipennis* (Curtis, 1834)**

Material. FinLoc05, 10–23 July 2010, 6♂♂20♀♀; 23 July–07 August 2010, 4♂♂; 7–24 August 2010, 1♂3♀♀, Malaise trap. FinLoc08, 23 July–7 August 2010, 5♂♂, Malaise trap. FinLoc19, 9–24 July 2010, 1♀; 24 July–6 August 2010, 2♂♂, Malaise trap. FinLoc21, 25 June–9 July 2010, 39♂♂2♀♀; 9–24 July 2010,

13♂♂7♀♀; 24 July–6 August 2010, 5♂♂2♀♀, Malaise trap. FinLoc 42, 17–26 July 2010, 1♂, Malaise trap. FinLoc56, 2–17 July 2010, 11♂♂; 17–26 July 2010, 5♂♂4♀♀; 26 July–25 August 2010, 2♂♂2♀♀, Malaise trap. FinLoc81, 24 June–20 July 2010, 1♂; 20–30 July 2010, 1♂1♀, Malaise trap. FinLoc84, 1 August 2010, 2♂♂, net. FinLoc85, 10 August 2010, 2♂♂, light trap, leg. R.J.D.I. Voith.

Additional material. FI, Kautokeino: Breibuktnes, 69.04284°N 23.09658°E, 1 July 1989, 2♂♂, leg. B.A. Sagvolden; Gjevdneguoika, 69.19391°N 23.57546°E, 3 July 1989, 1♂, net, leg. A. Fjellberg; Kautokeino, 69.00281°N 23.04822°E, 27 July 1955, 1♂, net, leg. A. Løken; Kautokeino, 69.00281°N 23.04822°E, 4 July 1979, 6♂♂, net, leg. L. Greve; Kautokeino, Kautokeinoelva, 68.98968°N 23.04829°E, 23 July 1987, 3♂♂, net, leg. G.E.E. Søli; Låhpoluoppal, 69.20953°N 23.76158°E, 2 July 1989, 1♂, net, leg. B.A. Sagvolden; **FN**, Tana: Skiippagurra, 70.16443°N 28.23195°E, 26 July 1987, 1♀, net, leg. G.E.E. Søli; Tana bru, 70.19896°N 28.20156°E, 4 July 1989, 1♂2♀♀, net, leg. A. Fjellberg; **FØ**, Sør-Varanger: Svanvik, Mellesmo, 69.45375°N 30.06198°E, 20 June–4 August 1986, 4♂♂1♀, Malaise trap, leg. F. Midtgaard.

Potamophylax nigricornis (Pictet, 1834)

Material. FinLoc05, 30–31 August 2010, 1♂, light trap. FinLoc65, 20–30 July 2010, 1♀, Malaise trap.

Additional material. FV, Alta: Gjermundsby, 70.11251°N 22.98277°E, 29 July 1987, 1♀, net, leg. G.E.E. Søli; **FI**, Kautokeino: Suolovuopmi, 69.58218°N 23.53135°E, 24 June 1984, 1♂, net, leg. T.R. Nielsen; **FN**, Gamvik, Mehann, Vedvikneset, 71.04556°N 27.86177°E, 30 July 1986, 1♂, net, leg. G.E.E. Søli.

Stenophylax sequax (McLachlan, 1875)

Material. FinLoc05, 30–31 August 2010, 4♂♂, light trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Troms (Solem & Andersen 1996).

GOERIDAE

Silo pallipes (Fabricius, 1781)

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 24–26 July 1987, 4♂♂2♀♀, net & Malaise trap, leg. G.E.E. Søli; Avzi, 69.01901°N 23.23525°E, 2 July 1989, 1♂2♀♀, net, leg. A. Fjellberg; Kautokeino, Kautokeinoelva, 68.98968°N 23.04829°E, 23 July 1987, 1♂, net, leg. G.E.E. Søli.

BERAEIDAE

Beraea pullata (Curtis, 1834)

Material. FinLoc65, 24 June–20 July 2010, 1♂1♀, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Troms (Solem & Andersen 1996).

Beraeodes minutus (Linnaeus, 1761)

Material. FinLoc81, 24 June–20 July 2010, 2♀♀, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Troms (Solem & Andersen 1996, Bongard et al. 1991, Artskart 2012).

MOLANNIDAE

Molanna albicans (Zetterstedt, 1840)

Material. FinLoc20, 24 July 2010, 7♂♂1♀, net. FinLoc29, 28 July 2010, 1♀, net. FinLoc64, 27 July 2010, 2♂♂, net. FinLoc65, 30 July–10 August 2010, 1♀, Malaise trap. FinLoc96, 4 September 2010, 1♂, net.

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 2 July 1989, 7♂♂, net, leg. A. Fjellberg; Goaskenjåvre, 69.02365°N 23.04916°E, 1 August 1982, 1♂1♀, net, leg. L. Greve; Guhkesjåvri, 69.13099°N 22.70404°E, 25 July 1987, 2♂♂, net, leg. G.E.E. Søli; Håvgajåvri, 68.83897°N 23.19930°E, 23 July 1987, 2♂♂, net, leg. G.E.E. Søli; Kautokeino, Kautokeinoelva, 68.98968°N 23.04829°E, 23

July 1987, 3♂♂, net, leg. G.E.E. Søli; FN, Vardø: Barvikvatnet, 70.41076°N 30.92890°E, 22 July 1987, 16♂♂, net, leg. G.E.E. Søli; Tana: Tana bru, 70.19896°N 28.20156°E, 3 July 1989, 1♂, net, leg. B.A. Sagvolden; FØ, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 3♂♂3♀♀, net, leg. J. Skartveit; Noatun, 69.16532°N 29.24579°E, 5 July 1989, 3♂♂, net, leg. A. Fjellberg; Sortbrysttjern, 69.15848°N 28.97891°E, 4 July 1989, 1♂, net, leg. A. Fjellberg.

Molanna angustata Curtis, 1834

Additional material. FI, Kautokeino: Avzi, 69.01901°N 23.23525°E, 23 July 1987, 26♂♂1♀, net, leg. G.E.E. Søli; Avzi, 69.01901°N 23.23525°E, 2 July 1989, 2♂♂1♀, net, leg. A. Fjellberg.

Molannodes tinctus (Zetterstedt, 1840)

Material. FinLoc19, 25 June–9 July 2010, 1♂; 9–24 July 2010, 1♂; 24 July–6 August 2010, 1♂, Malaise trap. FinLoc21, 9–24 July 2010, 2♂♂; 24 July–6 August 2010, 1♂, Malaise trap. FinLoc32, 28 July 2010, 2♂♂1♀, net. FinLoc53, 26 July 2010, 1♀, net. FinLoc56, 2–17 July 2010, 1♀; 30 July–10 August 2010, 1♀, Malaise trap. FinLoc65, 24 June–20 July 2010, 9♂♂4♀♀, Malaise trap. FinLoc65, 30 July–10 August 2010, 1♀, Malaise trap. FinLoc81, 24 June–20 July 2010, 3♂♂3♀♀; 20–30 July 2010, 2♂♂, Malaise trap.

Additional material. FI, Kautokeino: Bidjovagge, 69.14360°N 22.65167°E, 25 July 1987, 1♂, net, leg. G.E.E. Søli; Guhkesjávri, 69.13099°N 22.70404°E, 25 July 1987, 1♂, net, leg. G.E.E. Søli; FØ, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 1♂3♀♀, net, leg. J. Skartveit; Neiden, 69.70212°N 29.38778°E, 7 August 1996, 1♂, net, leg. J. Skartveit.

LEPTOCERIDAE

Athripsodes cinereus (Curtis, 1834)

Material. FinLoc19, 24 July–6 August 2010, 1♀, Malaise trap. FinLoc21, 24 July–6 August 2010, 3♂♂, Malaise trap. FinLoc64, 3 September 2010, 2♀♀, net. FinLoc85, 10 August 2010, 1♂,

light trap, leg. R.J.D.I. Voith. FinLoc92, 30 July 2010, 1♀, net.

Athripsodes commutatus (Rostock, 1874)

Material. FinLoc19, 24 July 2010, 1♂, net. FinLoc21, 24 July–6 August 2010, 1♂2♀♀, Malaise trap. FinLoc75, 31 July 2010, 7♂♂1♀, net.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Nord-Trøndelag (Solem & Andersen 1996).

Ceraclea annulicornis (Stephens, 1836)

Material. FinLoc18, 24 July 2010, 1♂1♀, net. FinLoc21, 25 June–9 July 2010, 1♀, Malaise trap.

Additional material. FI, Karasjok: Váljohka, 69.69326°N 25.93166°E, 26 July 1987, 2♂♂, net, leg. G.E.E. Søli.

Ceraclea dissimilis (Stephens, 1836)

Material. FinLoc75, 7 September 2010, 1♀, net. FinLoc85, 6–7 September 2010, 1♂, light trap.

Ceraclea fulva (Rambur, 1842)

Material. FinLoc65, 30 July–10 August 2010, 1♂1♀, Malaise trap.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern parts of the country north to Sør-Trøndelag (Solem & Andersen 1996).

Ceraclea nigronevosa (Retzius, 1783)

Material. FinLoc19, 24 July 2010, 1♀, net. FinLoc30, 28 July 2010, 1♂1♀, net.

Additional material. FØ, Sør-Varanger: Sortbrysttjern, 69.15848°N 28.97891°E, 5 July 1974, 2♂♂1♀; 4 July 1989, 2♀♀, net, leg. A. Fjellberg.

Ceraclea perplexa (McLachlan, 1877)

Additional material. FI, Kautokeino: Kautokeino, Kautokeinoelva, 68.98968°N 23.04829°E, 23 July 1987, 1♂, net, leg. G.E.E. Søli; FØ, Sør-Varanger: Sortbrysttjern,

69.15848°N 28.97891°E, 4 July 1989, 2♂♂, net, leg. A. Fjellberg.

Remarks. In Norway the only previous record is from 1900 from "Glommen near Saeterstoen" in Sør-Odal, Hedmark (Morton 1901). The species is listed as vulnerable (VU) in the 2010 Norwegian Red List for Species (Kjærstad *et al.* 2010). In Finland it is recorded from most parts of the country including Lapponia inarensis (Li) and Lapponia enontekiensis (Le) (Salokannel *et al.* 2011).

Mystacides azurea (Linnaeus, 1761)

Material. FinLoc07, 23 July 2010, 1♂1♀; 30 August 2010, 1♂, net. FinLoc08, 23 July–07 August 2010, 1♀, Malaise trap. FinLoc21, 31 August 2010, 1♂, net. FinLoc56, 26 July–25 August 2010, 1♂, Malaise trap. FinLoc64, 27 July 2010, 2♂♂; 3 September 2010, 1♂, net. FinLoc65, 10–21 August 2010, 1♂, Malaise trap. FinLoc66, 5 September 2010, 1♀, net. FinLoc68, 31 July 2010, 2♀♀♀, net. FinLoc69, 30 July 2010, 1♂; 7 September 2010, 2♂♂, net. FinLoc76, 7 September 2010, 6♂♂2♀♀♀, net. FinLoc82, 7 September 2010, 17♂♂2♀♀♀, net. FinLoc83, 5 September 2010, 1♀, net. FinLoc85, 6–7 September 2010, 2♂♂, light trap. FinLoc85, 10 August 2010, 514♂♂17♀♀♀; 22 September 2010, 2♂♂; 22 September–11 October 2010, 1♂, light trap, leg. R.J.D.I. Voith. FinLoc92, 30 July 2010, 3♂♂2♀♀♀, net.

Additional material. FØ, Sør-Varanger: Svanvik, Svanhovd, 69.45644°N 30.05056°E, 4 August–1 September 1986, 1♂, Malaise trap, leg. F. Midtgaard.

Mystacides longicornis (Linnaeus, 1758)

Additional material. FØ, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 4♂♂, net, leg. J. Skartveit.

Remarks. The species was not listed for Finnmark by Solem & Andersen (1996). In Norway it is previously recorded from the southern and southeastern parts of the country north to Sør-Trøndelag (Solem & Andersen 1996).

Mystacides nigra (Linnaeus, 1758)

Additional material. FI, Kautokeino: Avzi,

69.01901°N 23.23525°E, 2 July 1989, 5♂♂, net, leg. A. Fjellberg; Guhkesjávri, 69.13099°N 22.70404°E, 25 July 1987, 3♂♂3♀♀♀, net, leg. G.E.E. Søli; Håvgajávri, 68.83897°N 23.19930°E, 23 July 1987, 17♂♂2♀♀♀, net, leg. G.E.E. Søli.

Oecetis ochracea (Curtis, 1825)

Material. FinLoc92, 30 July 2010, 1♂, net.

Additional material. FØ, Sør-Varanger: Dagvatnet, 69.08902°N 28.91586°E, 2 August 1996, 8♂♂1♀, net, leg. J. Skartveit.

Discussion

In their check-list of the Norwegian Trichoptera Solem & Andersen (1996) listed 92 species from Finnmark. During the present project we have identified 108 species from Finnmark based partly on material collected in 2010, partly on older material housed in the entomological collection at the University Museum of Bergen. Of these, *Rhyacophila obliterata*, must be regarded as "new" to Norway and *Rhyacophila fasciata*, *Glossosoma nylanderi*, *Agapetus ochripes*, *Agraylea cognatella*, *Ithytrichia lamellaris*, *Oxyethira falcata*, *O. sagittifera*, *Wormaldia subnigra*, *Hydropsyche newae*, *H. saxonica*, *Brachycentrus subnubilis*, *Apatania auricula*, *A. dalecarlica*, *Annitella obscurata*, *Limnephilus decipiens*, *L. externus*, *L. femoratus*, *L. politus*, *L. sparsus*, *L. stigma*, *L. subnitidus*, *L. vittatus*, *Phacopteryx brevipennis*, *Halesus tessellatus*, *Stenophylax sequax*, *Beraea pullata*, *Beraeodes minutus*, *Athripsodes commutatus*, *Ceraclea fulva*, *C. perplexa* and *Mystacides longicornis* were not listed for Finnmark by Solem & Andersen (1996). Solem & Andersen (1996) listed another 16 species for Finnmark which we failed to find during the present survey. Further, Stainer (1937) recorded *Limnephilus bipunctatus* Curtis, 1834 from Adamsfjord, Lebesby in Finnmark, a record which is not included in neither Brekke (1946) or in Solem & Andersen (1996). In addition, Tobias (1981) described *Apatania forsslundi* Tobias, 1981 based on material from the Varanger Peninsula. This species was omitted by Solem & Andersen (1996) (see comments for *A. auricula* above),

but recent DNA barcoding has demonstrated that the species should be regarded as a good species (Salokannel *et al.* 2010). The total number of Trichoptera known to occur in Finnmark thus stands at 126 species.

Bergersen (1987) recorded *Hydroptila pulchricornis* Pictet, 1834 from the River Altaelva, but this record should be confirmed as the species in Norway only is known to occur in the southernmost parts of the country (Solem & Andersen 1996) and in Finland only is recorded north to the northern part of Ostrobothnia borealis (PeP) (Salokannel *et al.* 2011). Further, Tobias & Tobias (2010) list an additional six species for Finnmark, viz.: *Agraylea multipunctata* Curtis, 1834, *Hydroptila vectis* Curtis, 1834, *Hydropsyche silfvenii* Ulmer, 1906, *Hydropsyche siltalai* Döhler, 1963, *Athripsodes aterrimus* (Stephens, 1836) and *Ceraclea excisa* (Morton, 1904). However, proper records with locality information should be given before these species are added. Finnmark is undoubtedly among the most species rich regions in Norway when it comes to Trichoptera, maybe surpassing Hedmark and Buskerud, which are listed with 127 and 125 species, respectively, in Solem & Andersen (1996). From northernmost Finland Salokannel *et al.* (2011) recorded 117 species from Lapponia enontekiensis (Le) and 135 species from Lapponia inarensis (Li).

Four species exclusively taken in Finnmark are listed as vulnerable (VU) in the 2010 Norwegian Red List for Species and *Holocentropus varangensis* Mey, 1987 as data deficient (DD) (Kjærstad *et al.* 2010). Of these *Asynarchus thedenii* and *Limnephilus diphyes* were taken during the present survey, while *H. varangensis*, *Lenarchus productus* (Morton, 1896) and *Triaenodes detruncatus* Martynov, 1924 were not encountered. Further, new records of *Oxyethira falcata* and *Ceraclea perplexa* are given. Both are listed in the 2010 Norwegian Red List for Species as critically endangered (CR) and vulnerable (VU), respectively, based on single records from the southern parts of the country (Kjærstad *et al.* 2010). The survey has thus added new knowledge about four species which previously have been found only once or a few times in Norway.

Acknowledgements. The study was funded by a grant from the Norwegian Taxonomy Initiative. We are greatly indebted to Juha Salokannel, Tampere, Finland for information and for all help with identification and to Reidar J.D.I. Voith, Porsgrunn, for providing us with Trichoptera material collected at Svanhovd Research Station in 2010.

References

- Aagaard, K., Dolmen, D., Andersen, T., Bongard, T., Kjærstad, G. & Solem, J.O. 2006. *Døgnfluer, øyestikkere, steinfluer og vårfluer. Ephemeroptera, Odonata, Plecoptera, Trichoptera*. Pp. 211–216 in Kålås, J.A., Viken, Å. & Bakken, T. (Eds), Norsk Rødliste 2006 - 2006 Norwegian Red List. Artsdatabanken, Norway.
- Andersen, T. 1974. Caddis flies (Trichoptera) from the outer part of Sogn and Fjordane. *Norwegian Journal of Entomology* 21, 25–29.
- Andersen, T. 1975. Caddis flies (Trichoptera) from Vestfold, south-eastern Norway. *Norwegian Journal of Entomology* 22, 155–162.
- Andersen, T. & Wiberg-Larsen, P. 1987. Revised checklist of NW European Trichoptera. *Entomologica Scandinavica* 18, 165–184.
- Andersen, T., Johanson, K.A., Kobro, S. & Ligaard, S. 1993. Faunistical records of Caddis flies (Trichoptera) from Østfold and Akershus, SE Norway. *Fauna Norvegica, Serie B* 40, 1–12.
- Artskart. 2012. *Artskart 6.1*. Artsdatabanken & GBIF-Norge 2007–2012. Available from: <http://artskart.artsdatabanken.no/default.aspx> (2 September 2012).
- Bergersen, R. 1987. Fiskeribiologiske undersøkelser i Alta-Kautokeinovassdraget. Bunnfauna og ernæring hos laksunger i Altaelva nedenfor demningen, 1984–1986. *Tromura, Naturvitenskap* 60, 1–69.
- Bergersen, R. 1992. Bunndyr og ernæring hos laksunger i Altaelva, 1980–1992. *Tromura, Naturvitenskap* 71, 1–45.
- Botosaneanu, L. 1974. Pour une meillaure connaissance des *Micrasema* d'Europe. *Fragmenta Entomologica* 10, 65–106.
- Bongard, T., Arnekleiv, J.V. & Haug, A. 1991. *Hydropsyche saxonica* McLachlan, 1884 (Trichoptera, Hydropsychidae) new to Norway. *Fauna norvegica, Serie B* 38, 27–29.
- Brekke R. 1946. Norwegian Caddisflies (Trichoptera). *Norsk Entomologisk Tidsskrift* 7, 155–163.
- Dankova, N.V. & Shutova, E.V. 2002. Light and floating emergence trapping of Trichoptera in Murmansk Region. In Mey, W. (Ed.), Proceedings

- of the 10th International Symposium on Trichoptera. *Nova Supplementa Entomologica, Keltern* 15, 491–498.
- Direktoratet for Naturforvaltning. 1999. Nasjonal rødliste for truede arter 1998. Norwegian Red List 1998. *DN-rapport* 3, 1–161.
- Ekrem, T., Roth, S., Andersen, T., Stur, E., Søli, G.E.E. & Halvorsen, G.A. 2012. Insects inhabiting freshwater and humid habitats in Finnmark, northern Norway. *Norwegian Journal of Entomology* 59, 91–107.
- Esben-Petersen, P. 1902. Bidrag til en fortegnelse over arktisk Norges Neuropterfauna. (With description of a new species of Ephemeridæ by Rev. A. E. Eaton). *Tromsø Museums Aarshefter* 25, 119–153.
- Esben-Petersen, P. 1910. Bidrag til en fortegnelse over arktisk Norges Neuropterfauna. II. *Tromsø Museums Aarshefter* 31–32 (1908–1909), 75–89.
- Forsslund, K.H. 1932. Zur Kenntnis der Trichopteren des nördlichen Norwegens. *Tromsø Museums Årshefte, Naturhistorisk Avdeling* 4, 52 (1929) (2), 1–19.
- Kjærstad, G., Andersen, T., Olsvik, H.A. & Brittain, J.E. 2010. *Døgnfluer, øyentikkere, steinfluer og vårfluer: Ephemeroptera, Odonata, Plecoptera, Trichoptera*. Pp. 227–234 in Kålås, J.A., Viken, Å., Henriksen, S. & Skjelseth, S. (Eds), The 2010 Norwegian Red List for Species. Norwegian Biodiversity Information Centre, Norway.
- Kålås, J.A., Viken, Å., Henriksen, S. & Skjelseth, S. (Eds). 2010. *The 2010 Norwegian Red List for Species*. Norwegian Biodiversity Information Centre, Norway.
- Lillehammer, A. 1967. Registrering av insekter i Syd-Varanger sommeren 1966. *Fauna* 20, 189–194.
- McLachlan, R. 1899. Trichoptera, Planipennia, and Pseudo-Neuroptera, collected in Finnmark in 1898 by Dr. T. A. Chapman and Mr. R. W. Lloyd. *Entomologist's Monthly Magazine*, 2 Series 10, 28–30.
- Malicky, H. 1983. *Atlas of European Trichoptera*. 298 pp. W. Junk Publishers, The Hague.
- Malicky, H. 2005. Ein kommentiertes Verzeichnis der Köcherfliegen (Trichoptera) Europas und des Mediterrangebietes. *Linzer Biologische Beiträge* 37, 533–596.
- Malicky, H. 2012. *Fauna Europaea: Trichoptera*. Fauna Europaea version 2.5. Available from: <http://www.faunaeur.org> (2 September 2012).
- Mey, W. 1987. *Holocentropus varangensis* n. sp. - eine neue Köcherfliege aus Skandinavien (Trichoptera, Polycentropodidae). *Entomologische Nachrichten und Berichte* 31, 255–258.
- Morton, K.J. 1901. Trichoptera, Neuroptera-Planipennia, Odonata and Rhopalocera collected in Norway in the summer of 1900. *Entomologist's Monthly Magazine* 37, 24–33.
- Salokannel, J., Rantala, M.J. & Wahlberg, N. 2010. DNA-barcoding clarifies species definitions of Finnish *Apatania* (Trichoptera: Apataniidae). *Entomologica Fennica* 21, 1–11.
- Salokannel, J., Mattila, K. & Rinne, A. 2011. Vesiperhosten maakuntaluettelo. *Diamina* 2011, 59–70.
- Sitalai, A.J. 1908. Zur Trichopterenfauna der nördlichen Fennoskandia. *Acta Societatis pro Fauna et Flora Fennica* 31 (2), 1–19.
- Solem, J.O. 1970. Trichoptera from South Varanger, North Norway. *Rhizocrinus* 1 (4), 1–8.
- Solem, J.O. & Andersen, T. 1996. *Trichoptera Vårfluer*. Pp. 172–180 in Aagaard, K. & Dolmen, D. (Eds), *Limnofauna Norvegica. Katalog over norsk ferskvannsf fauna*. Tapir, Trondheim.
- Stainer, J. 1937. Some observations on a collection of Trichoptera from Lapland, with a note on the synonymy of *Asynarchus modestus* Hagen. *The Entomologist* 70, 139–141.
- Svensson, B.W. & Tjeder, B. 1975. Taxonomic notes on some European Trichoptera. *Entomologica Scandinavica* 6, 67–70.
- Tobias, W. 1976a. Köcherfliegen und Steinfliegen einiger Gewässer in Sør Varanger (Nord-Norwegen). V. *Limnephilus minusculus* (Banks 1907) neu für Europa. *Entomologische Zeitschrift* 86, 121–125.
- Tobias, W. 1976b. Köcherfliegen und Steinfliegen einiger Gewässer in Sør Varanger (Nord-Norwegen). IV. *Trianodes detruncatus* Martynov neu für Norwegen. *Senckenbergiana Biologica* 57, 49–53.
- Tobias, W. 1981. Eine neue *Apatania*-Art aus Norwegen (Trichoptera: Limnephilidae). *Entomologische Zeitschrift* 91, 62–65.
- Tobias, W. & Tobias, D. 1971. Köcherfliegen und Steinfliegen einiger Gewässer in Sør Varanger (Nord-Norwegen) (Trichoptera, Plecoptera). *Senckenbergiana Biologica* 52, 227–245.
- Tobias, W. & Tobias, D. 1976. Köcherfliegen und Steinfliegen der Varanger-Halbinsel (Nord-Norwegen) (Trichoptera, Plecoptera). *Entomologische Zeitschrift* 86, 201–208.
- Tobias, W. & Tobias, D. 2010. *A catalogue of illustrations for the identification of the caddis flies (Insecta: Trichoptera) known to occur in Norway, Sweden and Finland - adults. Addendum: Checklist of caddisfly species (Trichoptera) from NE Norway*

(Finnmark) and the Kola Peninsula. Available from: <http://trichoptera.insects-online.de> (15 October 2012).

- Ugedal, O., Saksgård, L., Reinertsen, H., Koksvik, J.I., Jensen, A.J., Thorstad, E.B., Næsje, T.F., Saksgård, R. & Blom, H.H. 2003. Biologiske undersøkelser i Altaelven 2002. *Nina Oppdragsmelding* 791, 1–63.
- Walseng, B. & Huru, H. 1997. Ferskvannsinvertebrater i Finnmark med vekt på sjeldne og truede arter. *NINA Oppdragsmelding* 456, 1–60.
- Økland, K.A. 1981. Inndeling av Norge til bruk ved biogeografiske oppgaver - et revidert Strand-system. *Fauna* 34, 167–178.

Received: 29 September 2012

Accepted: 8 November 2012