

A survey of aquatic and terrestrial Heteroptera in northern Europe with special regard to Finnmark, Norway (and adjacent regions)

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Knowledge about Heteroptera from Northern Norway (Finnmark), Sweden (Torne Lappmark), Finland (Lapponia kemensis, Lapponia inarenis) and the historical parts of the Russian Lapland provinces (Lapponia rossica, Petsamo, Murmansk) is summarized. In total, 16 species of Heteroptera are reported new to Finnmark county and 15 new to the Swedish province Torne Lappmark. Detailed records are given for 49 species, mainly sampled during extensive fieldwork as part of a project about specific insect groups inhabiting freshwater and humid habitats in Finnmark in 2010. The species *Brachyarthrum limitatum* Fieber 1858, *Chlamydatus opacus* (Zetterstedt 1838), and, *Tytthus pygmaeus* (Zetterstedt 1838) are rarely found in Norway. Phenological and developmental data from northern populations of *Stenodema holsata* (Fabricius 1787) show that generations from different years and different instars of nymphs can overlap.

Key words: Heteroptera, aquatic, terrestrial, northern Europe, Finnmark, Norway.

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Introduction

Since Coulianos' annotated catalogue of the Heteroptera in 1998, knowledge about this taxon has been accumulating in Norway. The number of recorded species increased from 439 species in 1998 (Coulianos 1998) to at least 465 today (Ødegaard *et al.* 2010). Apart from records of species new to Norway (e.g. Olsen & Hågvar 2002, Dolmen 2004, Ødegaard & Endrestøl 2007, Staverløkk *et al.* 2009, Mjøs *et al.* 2010), recent publications cover taxa-specific studies (e.g. water bugs – Coulianos *et al.* 2008; Berytidae – Ødegaard & Staverløkk 2011; the genus *Psallus* Fieber 1858 – Endrestøl & Ødegaard 2011), applied studies (Jaastad *et al.* 2009) and general new faunistic information (e.g. Ødegaard 1998,

Staverløkk *et al.* 2008, Hågvar 2010, Hågvar & Olsen 2012, 2013). Other studies continue former research on the fauna of host plants (e.g. Hågvar 1976) including Scots pine (*Pinus sylvestris* Linnaeus 1753) (Thunes *et al.* 2004) and oak (*Quercus* Linnaeus 1753 spp.) (Endrestøl & Ødegaard 2011). Another promising approach is the survey of hot-spot habitat types (Ødegaard *et al.* 2009), already resulting in new records for Norway (Endrestøl & Ødegaard 2011). Recent regional studies, however, are rare and mostly restricted to southern Norway (e.g. Hansen & Coulianos 1988).

A faunistic study of specific insect groups, including Heteroptera, inhabiting freshwater and humid habitats in Finnmark, the northernmost part of mainland Norway, was initiated in 2010