Old and new records of *Petrobius brevistylis* Carpenter, 1913 (Archaeognatha, Machilidae) in North Norway

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The apterygote insect species *Petrobius brevistylis* is here reported for the first time from the Arctic, as defined by the July <10°C isotherm. It is found to be common along the coast all over North Norway, but appears to be scarce in the northeast area towards Russia. This area, as well as the Atlantic islands and Greenland, should be investigated in late August or early September when the juveniles are most conspicuous. The habitat preference, with occurrence in fishing ports and man-made structures such as piers and breakwaters, indicates spread to new localities by man.

Key words: Jumping bristletails, Archaeognatha, Machilidae, Petrobius brevistylis, North Norway.

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Introduction

The occurrence of the jumping bristletail *Petrobius* Leach, 1809 in North Norway is known from four previous publications. Per Brinck (1961) wrote that it occurred "up to North Cape" but without giving any references. Reidar Mehl (1977) collected insects in Nordland (but not Troms and Finnmark) 1966–1973 and reported *Petrobius* from three localities. Wim Vader (1983) observed *Petrobius* in Nordland, whereas Arne Fjellberg (1984) reported two records from Troms and one from Finnmark (Figure 1).

In 2008, a jar labeled "Eph." (Ephemeroptera) was found in the insect collection of Tromsø Museum. It contained vials of *Petrobius* collected by Jacob Sparre Schneider (one locality in Troms 1884) and Tron Soot-Ryen (3 localities in Nordland 1936 and 1941, 2 localities in Troms 1925 and 1934). These records had not been published.

The district museum in Mo i Rana, Nordland, the *Helgeland Museum* (previously Rana Museum), also had a collection of *Petrobius*. The specimens had been collected in Nordland in 1967 and 1977–1993, mainly by Per Straumfors, and were made available for new studies in 2009. Inspired by these finds, the first and second author started a pilot study in 2009 in Nordland and Troms, in which several new locations of the species were found.

It was then hypothesized that *Petrobius* might actually be common but overlooked. In 2010 we therefore decided to cover the most easily accessible parts of the whole of North Norway (Nordland, Troms and Finnmark counties).

Material and methods

The main bulk of the material was collected in 2011