

Distribution of Woodlice (Isopoda: Oniscoidea) in the Faroe Islands

Útbreiðsla av gráum undir steini (Isopoda: Oniscoidea) í Føroyum

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Úrtak

Fýra sløg av gráum undir steini eru staðfest í Føroyum: *Trichoniscus pusillus* Brandt, 1833, *Ligia oceanica* (Linnaeus, 1767), *Oniscus asellus* Linnaeus, 1758 og *Porcellio scaber* Latreille, 1804. Í hesari kannning varð einki nýtt slag funnið. Á 48 støðum vórðu grá undir steini staðfest fyrri fyrstu ferð, so saman við eldri kanningum eru tey nú staðfest á 59 støðum tilsamans. Hesi støð eru sett á kort. Orðskift verður um útbreiðsluna.

Abstract

A survey of woodlice has been conducted. Species found were: *Trichoniscus pusillus* Brandt, 1833, *Ligia oceanica*, *Oniscus asellus* Linnaeus, 1758 and *Porcellio scaber* Latreille, 1804, and no new species were found. We were able to document the presence of woodlice in 48 new locations, bringing the total to 59. The distribution found is discussed.

Introduction

The Faroe Islands are located in the north-eastern Atlantic Ocean and comprise 18 islands. They have been free of ice since the Weichselian glaciation 9500 years ago, since when an immigration of plants and animals

has occurred. During the last 1100 years, dispersal by man to and within the Faroe Islands, has been in effect (Enckell, 1985). It is quite possible that man has been the vector which has transported some species of woodlice to and within the Faroes, e.g. in the ballast of ships with agricultural tools.

It is well known that exotic terrestrial invertebrates are accidentally introduced to the Faroes each year (e.g. Jensen and Sivertsen, 2004; 2005; Bengtson *et al.*, 2004). We do not know of any recently introduced woodlice.

Scharff (1904) published the first two records of woodlice from the Faroe Islands followed by Lohmander (1929) and Stephensen (1929) who worked a large material of terrestrial isopods and marine crustaceans (Isopoda and Tanaidacea) collected on the Faroes.

Ligia oceanica is a large species, about 30mm long. It is an amphibian and occurs



Figure 1. *Oniscus asellus*

mainly on rocky beaches under stones and rocks. When disturbed it can either disappear down between the rocks, or drop into the water. *Oniscus asellus* and *Porcellio scaber* are both about 10-15mm long. Both are rather common in deciduous woods and “hagi” (i.e. outfield); *P. scaber* also occurs in houses and e.g. birds’ nests. *Trichoniscus pusillus* is the smallest species in the islands, about 3-5mm long. It occurs in the same habitats as the other two terrestrial species. The three first mentioned species have a normal reproduction, but *T. pusillus* can also be parthenogenetic, implying that its capacity for dispersal after immigration is higher than for the others.

None of the isopods are pests; they are mainly nocturnal and not usually seen during daytime.

Woodlice are predominantly herbivorous (Hopkin, 1991).

According to Poulsen *et al.* (1998) woodlice are either called ‘grótlús’ or ‘grátt undir

steini’ in Faroese, but they are frequently referred to by different names. On the island of Skúvoy they are referred to as ‘veggjalús’ (which is actually the bedbug, *Cimex lectularius*) (*pers. comm.* Birgir Thomsen, Jóannis Mikkelsen). Complicating matter further, *bristletails* (*Thysanura*) are referred to as ‘veggjalús’ in the village of Hvannasund (*pers. comm.* Hans Jørgen Nysted).

Material and Methods

J-K. J. has systematically collected woodlice since 2001, over a five year period, and has been in contact with numerous people, which have assisted with collecting on all the islands, with the exception of Lítla Dímun.

All collected specimen are preserved in 70% ethanol (a few are slide mounted according to the method employed by Palma (1978). The collected woodlice were identified by J-K. J. using a stereo loupe and the key by Hopkin (1991).

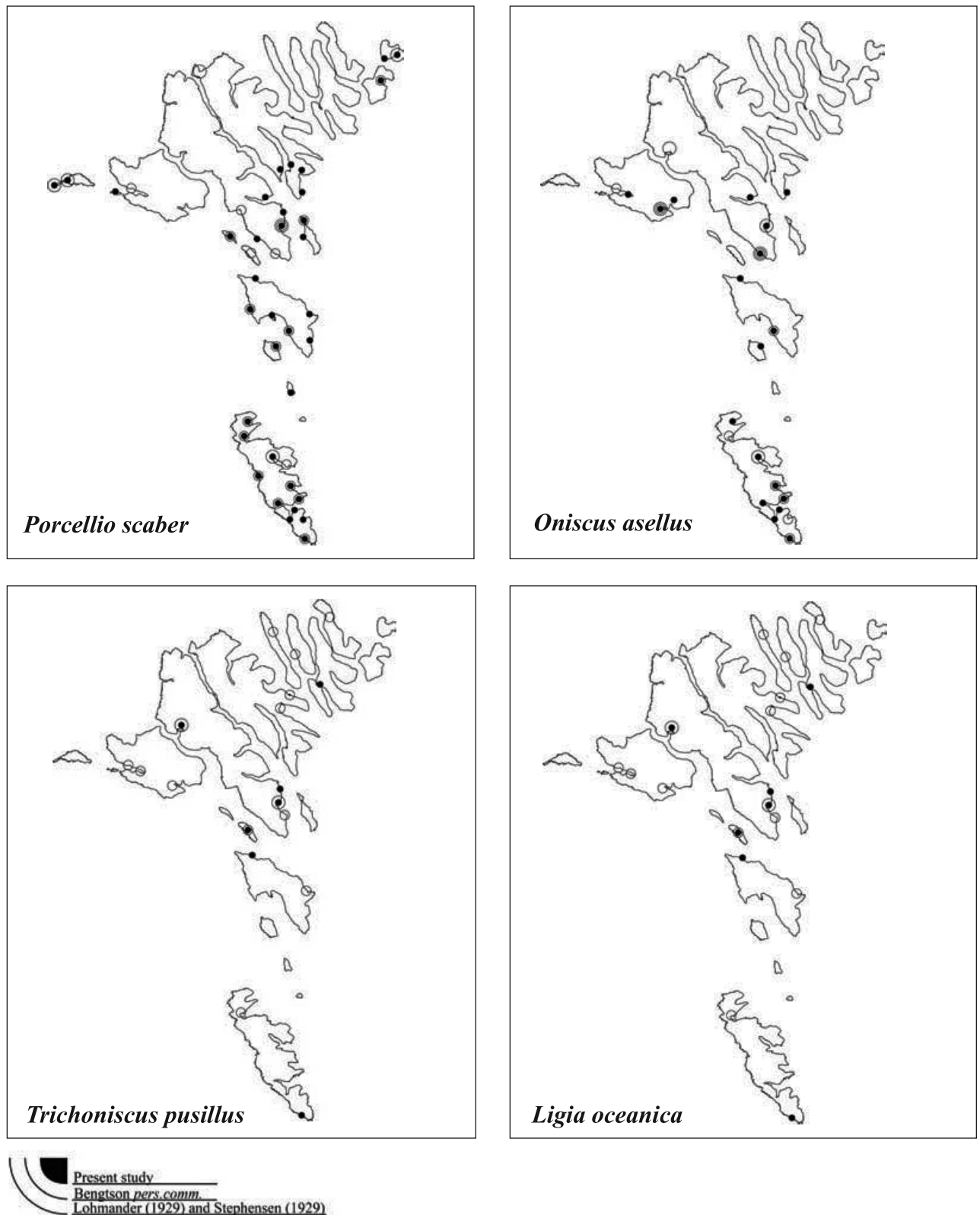


Figure 2. The sites where four species of woodlice were found in the Faroes. Dots and circles represent positive finds.

Three of the four found species *L. oceanica*, *O. asellus* and *P. scaber* can be identified in the field, which is why only 485 specimens were collected of these species.

All species new to an area have been identified by collected specimen. Figure 2 shows in which locations species have been found in this study. It also includes those of Lohmander (1929) and Stephensen (1929) and Bengtson *pers. comm.*

Voucher specimens representing all the records, have been deposited in the collections of the Museum of Natural History, Tórshavn, Faroe Islands.

During 1978 and 1979 extensive fieldwork was conducted on the Faroes (Bengtson, 1979) resulting in check-lists of several groups of invertebrates, part of this material has not been published until now.

Results

The distribution of the species differ (Fig. 2). In the areas where it is found, *P. scaber* seems to be the most abundant, i.e. it is found in most locations. But it is absent from the central-north part of the Faroes, with the exception of one record from the village of Eiði prior to 1929. It has been found in three locations in the northeastern area, and in four locations in the northwestern area. *O. asellus* shows a similar distribution, with only one recorded location north of 62° 05' (prior to 1929).

Not many individuals have been found of *T. pusillus*. They seem to be evenly distributed, throughout the Faroes, but not much else can be deduced about the distribution. *L. oceanica* too seems to be evenly

distributed, but has been found in more locations than *T. pusillus*.

Discussion

No new species have been added to the lists of Lohmander (1929) and Stephensen (1929). The numbers of species from neighbouring areas are 37 in Britain and Ireland (Hopkin, 1991), 4 in the Shetlands, 5 in the Orkneys, 9 in the Hebrides (Harding and Sutton, 1985) and 7 in Iceland (Erling Ólafsson *in litt.*).

Woodlice are most commonly found in residential areas in the Faroe Islands. *T. pusillus*, having been found in 18, 19 and 22 locations, respectively, than *P. scaber*, which has been found in 41 locations.

The fact that we have been unable to find *P. scaber* in Kalsoy, Kunoy, Borðoy, Viðoy, could be due to oversight, but communication with local people confirm our negative results, and that woodlice are at least as scarce as in Fugloy and Svínø.

P. scaber was reported seen in the village of Húsar in the island of Kalsoy (Joan Isaksen *pers. comm.*) around 2003, but a thorough search in 2005 turned out negative. We have no explanation as to why woodlice seemingly are more scarce to the north of the Faroes.

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