

Agonum fuliginosum (Panzer, 1809). A New Record from the Faroe Islands

Agonum fuliginosum (Panzer, 1809). Nýggj skráseting úr Føroyum

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Úrtak

Svartaklukkan *Agonum fuliginosum* varð funnin í juli 2007 oman fyri Funningsbygd. Hetta er fyrstu ferð hendan klukkan er funnin í Føroyum. Klukkan varð funnin í vátum bøi, og er *Agonum fuliginosum* at finna í vátligum lendi í sínum útbreiðsluøki. Tað, at hendan klukkan nú er funnin í Føroyum, ger útbreiðsluøki hennara størri. Eisini vísir henda nýggja skrásetingin, hvønn týðning tað hevur at gera kanningar og skrásetingar av djóralívi í Føroyum. Við slíkum skrásetingum ber betur til at leggja til rættis, hvussu vit kunnu varðveita lívfrøðiliga margfeldið.

Abstract

A new record in the Faroe Islands, *Agonum fuliginosum* (Panzer, 1808)(Coleoptera, Carabidae), was discovered in July 2007 on the island of Eysturoy. It was found above the village Funningur which is situated on the north-western part of the island. *Agonum fuliginosum* was found on small wet meadow like riverbank's; in its area of distribution *A. fuliginosum* is associated with rather wet areas. Because of this new discovery, the known distribution of *Agonum fuliginosum* is expanded. The discovery shows the necessity of comprehensive surveys, to be able to plan protection of biodiversity.

Introduction

The dispersal of animals to the Faroe Islands is supposed to have commenced 9500 years ago when the latest ice age ended. Dispersal might be by air, drift with the sea or by man; if by man the dispersal started around year AD 700. Regarding carabids, 43 % of the carabid fauna in the Faroe Islands is described as antropochorous (Enckell *et al.*, 1987); these species depend on activities from mankind to be able to establish themselves. The remaining 57 % are able to establish without influence by man and have a more even distribution in the islands than the antropochorous species (Enckell *et al.* 1987). Carabids are one of the best described groups of insects in the Faroe Island, studies done in the 1920's were described by West (1930) and in 1978/79 by Bengtson (1981). Totally 26 species of carabidae were recorded in the Faroe Islands. During a recent environmental impact assessment (Fosaa *et al.* 2008), the carabidae species, *Agonum fuliginosum*

(Panzer, 1809), was recorded as new to the islands (Fig 1) as described in this note.

Agonum fuliginosum

Agonum fuliginosum was discovered in the Faroe Islands for the first time in July 2007 by the author. Three adult individuals of this carabid were captured at altitudes 150 and 170 m a.s.l. above the village Funningur in north-western Eysturoy, the second largest island in the Faroe Islands (Fig 2). The localities were small wet meadow like riverside banks; the whole area is used for sheep grazing like all the outfield in the country. The *Agonum fuliginosum* is about 5.5 - 7.8 mm in size; the colour is black and has no metallic shine which is unusual for the genus. A characteristic character of the genus is the short and narrow pronotum; in *Agonum fuliginosum* the pronotum is also narrow as compared with the elytra. The insect has long and slender legs which also is characteristic of *Agonum*.

Agonum has a worldwide distribution and the members are usually hygrophilous and occur close to water. They are predominantly carnivorous, feeding on small arthropods like collembola, mites etc. *Agonum fuliginosum* belongs to the subgenus *Europhilus* containing 10 species (Lindroth, 1986; Taglianti, 2007). *A. fuliginosum* is distributed all over Fennoscandia, south to central France, northern Italy and Bosnia. To the east they are found in western Siberia (Lindroth, 1986). *Agonum fuliginosum* reproduces in the spring and is described as preferring moist – often shaded – habitats, and it prefers eutrophic rather than oligotrophic habitats (Lindroth, 1986). Because of its wide distribution, *Agonum fuliginosum* is not dependent on

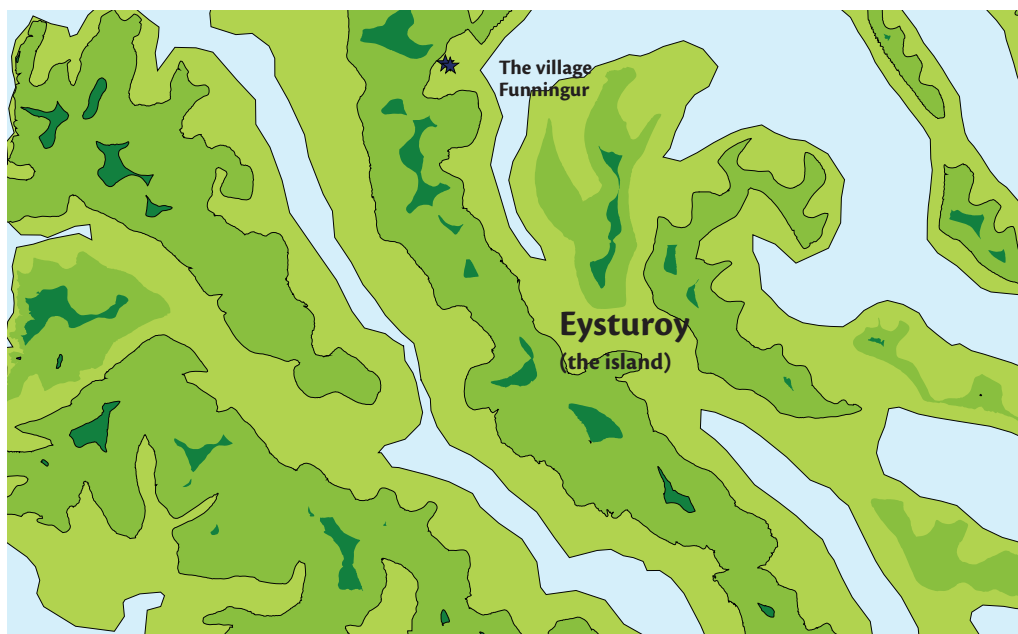


Fig. 1. *Agonum fuliginosum* (5,5-7,8 mm).

human activity, but because of its preference of eutrophic rather than oligotrophic conditions, man's influence might enhance their distribution.

How did *Agonum fuliginosum* come to the Faroe Islands

The reason that this species has not been recorded before, might be that the previous studies did not cover enough areas. *Agonum fuliginosum* is known from Shetland, which



Map 1. *Agonum fuliginosum* was found July 2007 above the village Funningur on the island Eysturoy in the Faroe Islands; see stars in blue colour. Colours on the map indicate different altitudes; dark green refers to areas above 600 m, medium green to areas between 300 and 600 m and light green refers to areas below 300 m.

is closer to the mainland and therefore contain a higher number of carabidae species than the Faroe Islands (Bengtson, 1981). The first record of this species in Isle of Skye (Hebrides) was in 1986 (Aitken, 1988). Aitken (1988) found also two other new carabids for the area showing the importance of conducting studies. *A. fuliginosum* is often observed on drifting wood and they usually have reduced wings, so it is likely that they had arrived to the Faroes either by drifting wood, import from Europe or by man e.g. tourism. Seasonal abundance is usually associated with reproduction (Lindroth, 1985; 1986). Our study was conducted in July and *Agonum fuliginosum* reproduces in spring-

time, which might have been the reason for so relatively few individuals were found.

Conclusion

Comprehensive studies of the outfield in the Faroes have first begun during the last years and this may be the reason for this first record of *Agonum fuliginosum*. The species has vestigial wings reducing its migratory capacity and might have arrived with drifting wood or by people, many tourists like to visit places like Funningur. On the other hand drifting wood is very common in the Faroes. The present finding can not conclude on how *Agonum fuliginosum* entered these is-

lands, but only stress the importance of continuous studies to be able to make sure assessments regarding immigration of species and measure of biodiversity. Regular studies will also provide a tool for policy makers and authorities to make the right policy decisions.

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