

Records of Drifted Plant Parts on Surtsey 1967

by

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All the vascular plants colonizing Surtsey up to the year 1967 have grown from drifted seed. It may, however, be considered possible that plant parts other than seed can drift to Surtsey and take roots on the shore if conditions are favourable. An investigation of the plant material drifting to the island would reveal what species might have a chance to establish in this way. The shores of Surtsey were thus inspected regularly during the research period in the summer 1967. Records were made of drifted plant material which is constantly being washed ashore, and from this material samples were taken for further study.

In the table plant parts of various species found drifted ashore in Surtsey during the year 1967 are recorded. The total number found are 16 species of vascular plants and one lichen sp., Zanthoria paretalis. It is difficult to state from where these plant parts have derived, as they are of rather common occurrence in Iceland. Thirteen of these species are found in the neighbouring islands and it is most likely that they have derived from there, this being the shortest distance from the living colonies of these species. These species are marked with a star in the table.

The remaining species have most likely been carried from the largest island, Heimaey, or from the mainland of Iceland. One of the species, Carex maritima, does not occur on Heimaey, so it must have drifted from other localities, most likely from the mainland.

Empetrum nigrum has limited distribution on Heimaey and besides this it is there isolated from the sea. Therefore it has most likely derived from the mainland where it might have been washed to the sea by rivers.

The species Elymus arenarius and Horckenia peploides have a

wide distribution on the south coast of Iceland. They are also found on Heimaey, but to a much minor extent. It is therefore more likely that plant parts of these species also drifted from the mainland. From the total amount of the drifted material, parts of Festuca rubra are most abundant, being found in 12 instances out of 14 observations times.

Cochlearia officinalis is the second in abundance as it is found 8 times out of 14, and Matricaria maritima the third, found 6 times out of 14. The high proportion of these species in the drifted plant material is due to the fact that they are the dominant and most frequent species of the neighbouring islands. This observation points out the rather obvious fact that the abundance of the drifted material is mostly influenced by the distance from the source of plant material.

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SPECIES AND PLANT PARTS RECORDED DRIFTED ASHORE ON SURTSEY 1967

Species	June 27th	June 28th	June 29th	June 30th	July 1st	July 7th	July 8th	July 11th	July 20th	July 21st	July 26th	July 27th	Aug. 1st	Aug. 3rd
* AGROSTIS TENUIS										S. I			S. I	S. I
* ARMERIA VULGARIS			I	I	I									
* ATRIPLEX PATULA		L. S												L. S. I
CAREX MARITIMA									L.S.I.R					
* COCHLERIA OFFICINALIS	S. I	L. S		L	S. I						S. I	S. I		L. S. I
EMPETRUM NIGRUM									L. S	L. S	L. S			L. S
ELYMUS ARENARIUS									S. I	S. I	I			
* FESTUCA RUBRA	L. S. I	L. S. I	L. S. I	L. I	L. S. I	L. S. I	L. S. I	I	S. I	L. S. I	L. I	L. I		
HONCKENYA PEPLOIDES							L. S		L. S	L. S	L. S		L. S	
* MATRICARIA MARITIMA			L. S. I		S. I	S. I	L						L. S	L. S
* POA PRATENSIS			I	L. I	I	L. S. I				I			S. I	S. I
* POA TRIVALIS							L. I						S. I	
* PUCCINELLIA MARITIMA														S. I
* SILENE MARITIMA													L. S. I	L. S
* TARAXACUM OFFICINALIS			I	I			I							
* SEDUM ROSEUM		S												
* ZANTORIA PARETALIS				Th										

I = INFLORESCENCE

L = LEAVES

S = STEMS

R = ROOTS

Th = THALLUS