Records of Drifted Plant Parts on Sutsey in 1968

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During the summer of 1968 records were made, as in previous years, of various plants that had drifted upon the island. This should reveal what species might have a chance to colonize the island via ocean dispersal. The floating diaspores can be in the form of seeds, or any other living plant parts, which are washed upon the shores. So far all the vascular plants on the island have grown from seed, but if conditions are favourable other plant parts may have a chance to survive the ocean transport and take roots on the island.

The shores of Surtsey were thus inspected for drifted plant material during the research period. From this material samples were taken for viability tests.

The plant parts of the various vascular species recorded are listed in Table I, with dates of observation and the part discovered. These vascular plants were of 15 species, but, in addition, various algae are constantly being washed ashore.

On April 27th a thallus of a lichen was discovered, and on May 5th a branch of moss was recorded.

The vascular plant parts were mostly of the same species as discovered in previous years. Nine of the species are found growing on the neigh-

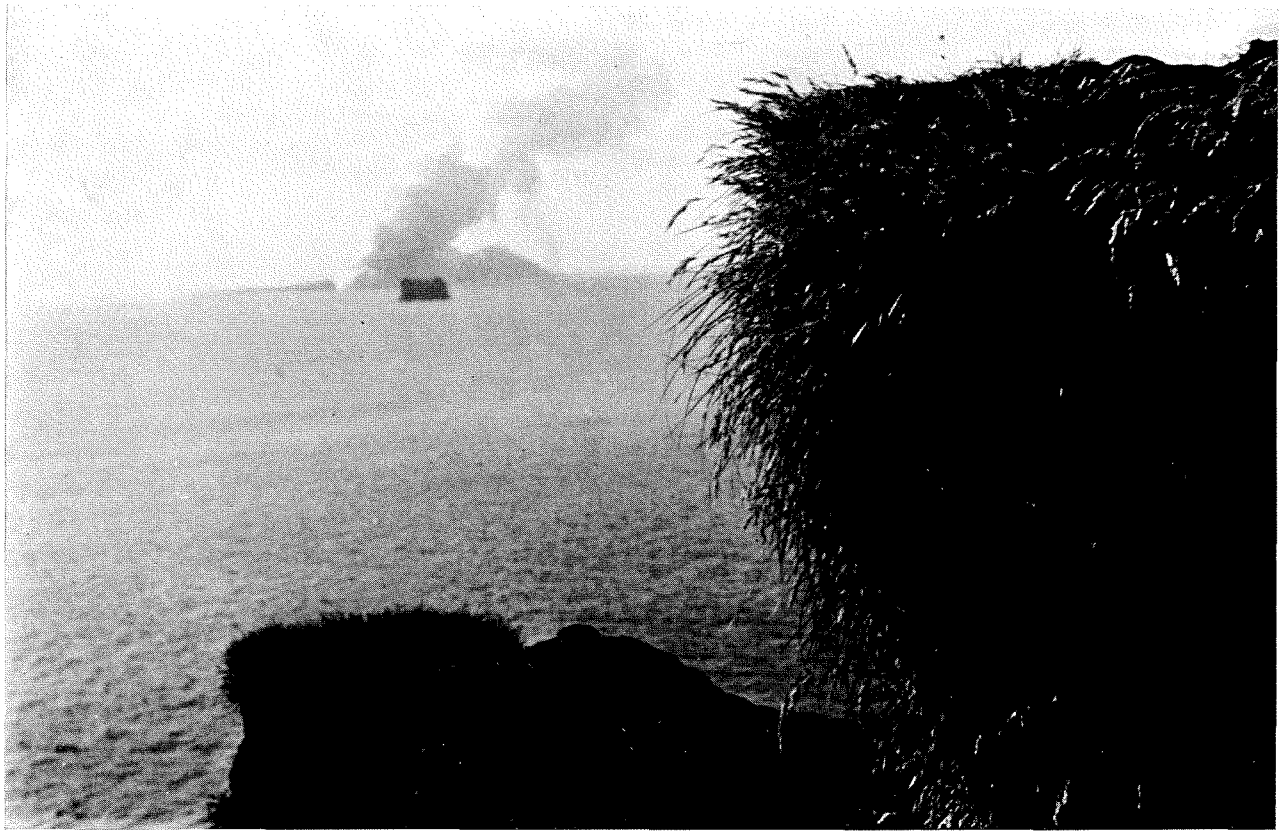
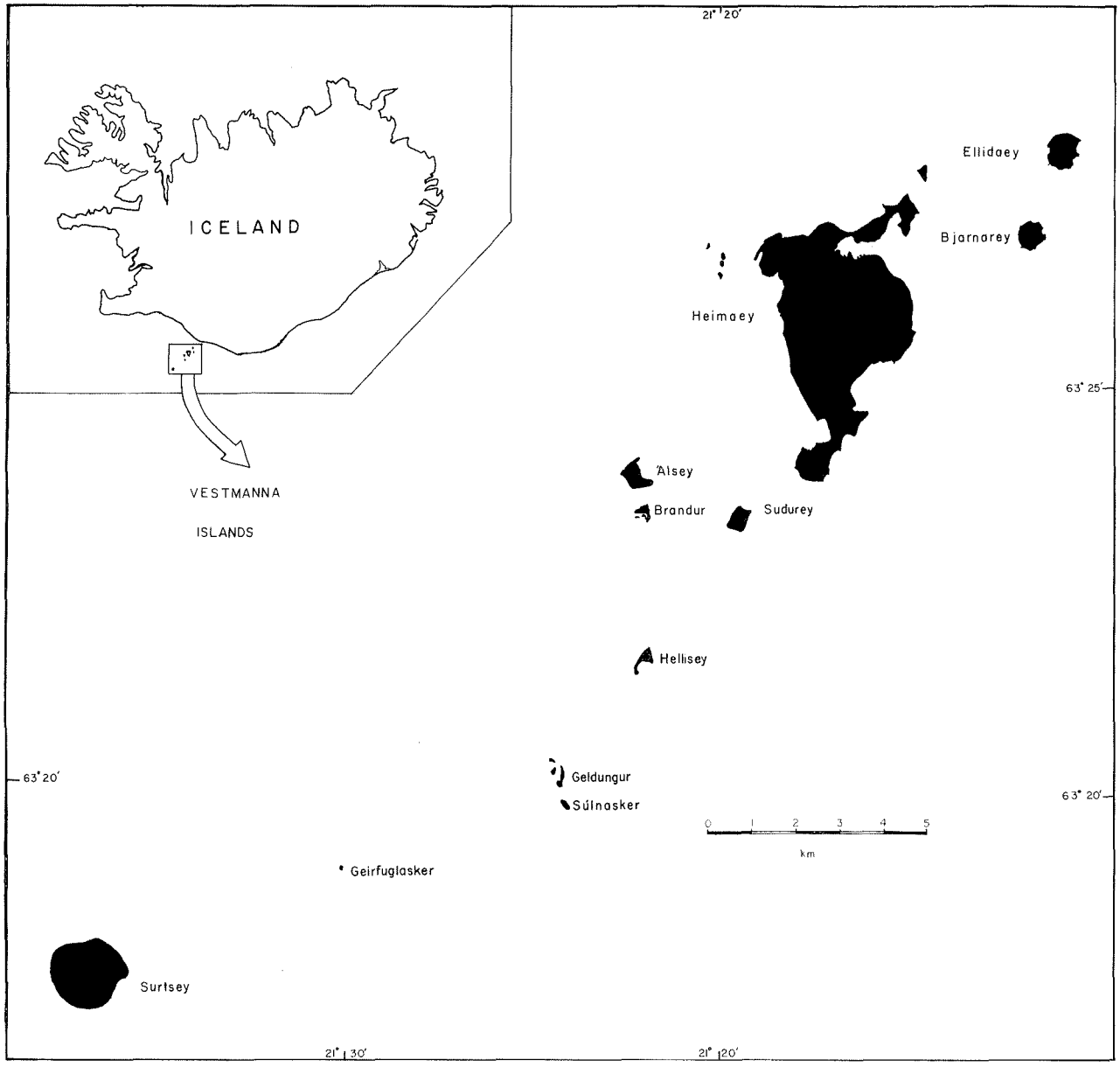


Fig. 1. A tuft of Festuca rubra hanging over the cliffs of Súlnasker. The rock of Geirfuglasker and Surtsey erupting are seen in the distance. Photo: Sturla Friðriksson.

bouring islands. These are marked with an asterisk in the table. The remaining species are either found growing on Heimaey, the largest member of the Westman Islands, or on the mainland of Iceland (see map).

As in previous years species common on the neighbouring islands are most abundant in the drifted material which indicates that the incidence of dispersal is mostly influenced by the distance from source of plant material, and its available quantity. Thus *Cochleria officinalis* and *Festuca rubra* were most frequent in the drifted material, both being common species on the neighbouring islands as well as on Heimaey (figure 1). Parts of *Betula pubescens, Empetrum nigrum,* and *Hippuris vulgaris* must have derived from the mainland of Iceland as these species do not occur on the Westman Islands. Parts of such species can easily be carried from the interior down by the rivers and then drift over to the islands as seeds or other floating plant parts. It is interesting to note that seeds of *Cakile edentula* were discovered among the debris on one occasion, although that species was not found growing on the island during the summer. It remains difficult to explain why this species, which previously had been most abundant on Surtsey, did not colonize in 1968.



Species and plant parts recorded dirfted ashore on Surtsey in 1968

Species	28/4	3/5	7/5	12/6	10/7	11/7	12/7	16/8	17/8
**Archangelica officinalis*			Se						
Betula pubescens					LS				
Cakile edentula			Se		LS				
**Cochleria officinalis*	LRI			SI	LS		LS		
Empetrum nigrum	B		B		LS	LS	LS	LS	L
**Equisetum arvense*	LS								
**Festuca rubra*			Se		LS				
Hippuris vulgaris	S					LS	LS		L
Honckenya peploides			Se						
**Matricaria maritima*	L								
**Mertensia maritima*			Se						
Sedum acre					LS				
**Sedum roseum*		S							
**Silene maritima*			Se						
**Stellaria media*								LS	L

B — Branch
I — Inflorescence
L — Leaves
R — Roots
S — Stems
Se — Seeds
* — Found on Heimaey

ACKNOWLEDGEMENTS

The work on which this paper is based was sponsored by the Surtsey Research Society with a grant from the U.S. Atomic Energy Commission, Environmental Branch, under contract No. AT (30–1)–3549,

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