

Report to
INVEST ICELAND ENERGY MARKETING

Description and mapping of vegetation in Reyðarfjörður, Iceland

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Abstract

The aim of this study is to describe the vegetation in Reyðarfjörður, and to evaluate its worth and its sensitivity to emissions from an aluminium smelter.

The vegetation in the entire study area was mapped to describe types of vegetation and the cover of the different types. A floristic survey was made of higher plants, mosses and lichens. For several common types of vegetation the cover of different species was measured. In order to describe possible effects of emissions from an aluminium smelter, the vegetation map, information about species composition and the cover of different species was combined with the results of model calculations of the dilution zone for airborne fluorides and with information about sensitivity of the species.

Several types of vegetation were identified in Reyðarfjörður during this study. The most common types were the following: "moss heath," "wild grassland," "cultivated grass field," "dwarf shrub heath" and "wetland". No rare or extraordinary vegetation types were found and no rare or red-listed species in the Hraun area. The vegetation in the area should nevertheless not be considered valueless.

Mosses had a proportionally high cover inside many vegetation types and in some vegetation types they compose almost the only cover. Sparsely vegetated areas were found but seldom signs of ongoing erosion. The diversity of species was rather high and probably increasing.

Years ago, sheep, cows and horses grazed the Hraun area. Now horses are about the only domestic animals that graze there, though wild reindeer occasionally forage there during the winter. The cultivated grass fields around the abandoned farms are no longer harvested. Hiking, berry picking and other outdoor activities can be enjoyed in the area.

Several of the identified vegetation types are dominated by species that are sensitive to airborne fluorides. The most common of these types is the "moss heath". Among vegetation types dominated by sensitive species, visible effect or damage of the vegetation can be expected in the dilution zone at a concentration of $> 1.0 \mu\text{g}/\text{m}^3 \text{F}$. Measurable effect on the sensitive vegetation types can be expected in the dilution zone at concentrations between $0.2 \mu\text{g}/\text{m}^3 \text{F}$ and $1.0 \mu\text{g}/\text{m}^3 \text{F}$.

Introduction

In previously published work in Iceland concerning the effects of emissions from aluminium smelters on vegetation the analysis of the concentration of emissions and the analysis of the vegetation have not been directly integrated. In this research program an attempt is made to combine detailed information about the vegetation and model calculations on the concentration of emissions from the smelter.

The report describes vegetation in Reyðarfjörður and presents a vegetation map of the area. The diversity of species of higher plants, moss and lichens in the area nearest to the planned smelter is described, along with the proportional cover of species among the most common types of vegetation. The conservation value of the vegetation is discussed and the use of the land for cultivation and grazing. Furthermore, within the calculated dilution zones for airborne fluorides the size and frequency of the main types of vegetation are calculated and presented on a map. The impact of airborne emissions on these vegetation types is also

briefly discussed. In a second report an evaluation of the impact of airborne emissions on plants, with special reference to the vegetation in Reyðarfjörður, is presented in further detail (Pálmason & Skye 1999).

The study area

The vegetation was mapped from Reyðarfjörður valley out to Hólmanes on the north side of the fjord and out to Hjálmeysi on the south side, in a zone extending from the coastal line up to the mountain slopes. The species composition and plant cover was studied in the area around Hraun, from the cliff ridge Björg (Sómastaðbjörg) in the west to the farm Flateyri in the east, again from the coastal line up to the mountain slopes (Fig. 1).

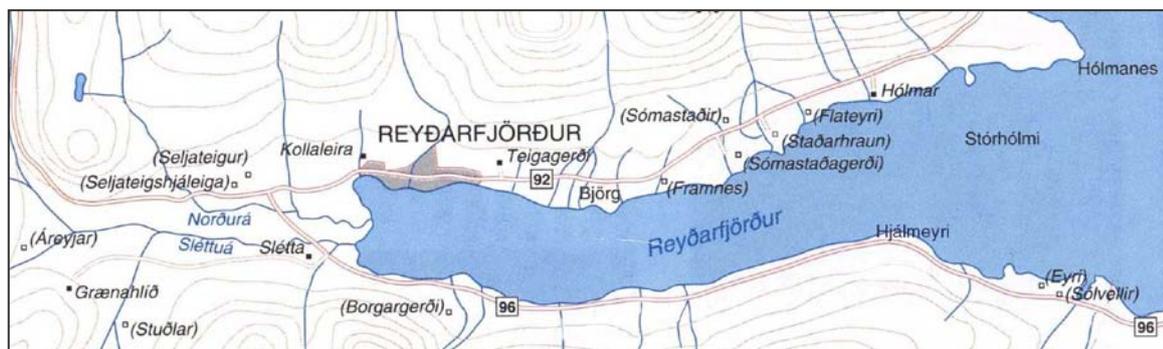


Figure 1. Map of Reyðarfjörður. (Modified from Sveitir og jarðir í Múlapingi 1995)

Methods

Field work

Field work was carried out during July and August, 1998. The vegetation in the whole study area was mapped for description of types of plant communities and their size and frequency. The mapping was done in the field using air photographs (1:5000) taken in 1996. The different plant communities were identified in the field and marked on the photographs. The same definition of types of vegetation was used as the Icelandic Natural History Institute uses for standard vegetation mapping in Iceland (The Icelandic Natural History Institute 1998, unpublished).

The cover of vegetation on the surface of the land was estimated visually. The proportion of surface covered with vegetation in each identified plant community was marked on the map. Rocks, cliffs, sand and bare soil were marked on the map and remarks included if land was disturbed.

A floristic survey of the area around Hraun was made for higher plants to describe exactly the diversity of species and the number of possible rare species. Much reliable information had already been collected 15 years ago (Thorarinsson et al. 1984). In the present survey, the species in the whole area around Hraun were carefully recorded and species of moss and lichen were collected for determination in the laboratory.

Among the most common types of plant communities around Hraun, 12 locations were selected for measurement of cover of different plant species. At each location two 50 m long transects were selected and 5 plots (0.33x1 m) randomly selected for measurements on each transect, that is 10 plots at each location. The cover was estimated visually in each of the selected plots, using the following scale: x = < 5%, 10% = 5 - 14%, 20% = 15 - 24%, 30% = 25 - 34%, 40% = 35 - 44%, 50% = 45 - 54%, 60% = 55 - 64%, 70% = 65 - 74%, 80% = 75 - 84%, 90% = 85 - 94%, 100% > 95%. All species of higher plants, moss and lichens in each plot were recorded. The plots were marked for possible use later in a monitoring program.

For documentation of species composition and cover of different species of lichen on stones and rocks, photographs were taken of stones and rocks in 20 plots (0.5 x 0.5 m), and samples collected for species determination later if a smelter is built. The plots were marked for possible use later in a monitoring program.

Preparation of the results

The vegetation map was drawn in a computer using colour air photographs (taken in August, 1998) as the background. A draft for a vegetation map of the surroundings of a planned aluminium smelter in Reyðarfjörður was presented in a workshop meeting at Vækerö, Oslo, on the 8th and 9th of February, 1999. The vegetation map, a floristic survey and information about the cover of different species described in this report, along with the sensitivity of different species (Pálmason & Skye 1999) in connection with the model calculations of distribution of airborne emissions (Guerreiro 1998), were discussed at the workshop.

The workshop decided that limits of two dispersion zones for airborne fluorides should be indicated on the final vegetation map. The inner zone reaches from the planned smelter site to an isoline of $1.0 \mu\text{g}/\text{m}^3$ F in gaseous form. The demarcations of the outer zone are at the isolines for $1.0 \mu\text{g}$ and $0.2 \mu\text{g}/\text{m}^3$ F in gaseous form (for further discussion see Pálmason & Skye 1999). The model calculations of fluoride concentrations in the air refer to 6 months (May to October 1998) of metrological measurements at Hraun (Guerreiro 1998).

Furthermore, the discussion at the workshop in Vækerö concluded that the influence on the vegetation of airborne fluorides from a 480.000 t/y aluminium smelter should also be analysed. For comparison it was decided to make the same analyses for a 120.000 t/y aluminium smelter, and to draw the limits of the dispersion zones for a 720 t/y aluminium smelter.

The isolines for $1.0 \mu\text{g}/\text{m}^3$ and $0.2 \mu\text{g}/\text{m}^3$ F (Guerreiro 1998) for 120 t/y, 480 t/y and 720 t/y smelters were then drawn on the vegetation map. The main vegetation types within these zones for 120 t/y and 480 t/y smelters were found by grouping together all subtypes of each main vegetation type (Table 1). The area within the isolines was calculated, as well as the area covered by each of the main types of vegetation.

The model calculations of SO_2 concentration due to emission from the planned smelter indicated that the area within the isoline that represents the Norwegian quality guideline for vegetation ($25 \mu\text{g}/\text{m}^3$ for 6 months) was much smaller than the area probably affected by fluoride emission (Guerreiro 1998).

Finally, a map was made of the distribution of different classes of vegetation cover on the land around Hraun.

Table 1. Subtypes of vegetation within each main type

Main type of vegetation	Subtypes
Moss heath	A1, A3, A4, A5, A7, A8, A31
Dwarf shrub, <i>Empetrum</i> , <i>Dryas</i> and <i>Betula nana</i>	B1, B2, B3, B6, C1, C2
Dwarf shrub, <i>Calluna</i> , <i>Vaccinium</i> and lichen	B4, B7, B9, J1
Moist land	T2, T4, T5, T10
Wood and shrubland	C5, D2, D3
Grassland	H1, H2, H3, H5
Herbs	L1, L2, L3
Wetland	U1, U2, U3, U4, U5, U10, U13, U18, U19, V1, V2
Sedge and rush heath	E1, E2, F2, G2
Horticultural land	R1
Cultivated land	R2, R3, R4, R5, R6

The species of lichen and moss were determined in the laboratory. It was possible to identify all samples of moss that were collected. Of the lichen samples that were collected, a number of crustose lichen species could not be recognized, and for others only the genus could be assessed. The samples are stored for possible later use.

The species of moss on rocks and stones in the photographed plots have been determined but not the lichen species, most of which are crustose lichens that cannot easily be identified. Again, the samples are stored for possible later use.

Results

The vegetation was mapped from Reyðarfjörður valley out to Hólmanes on the north side of the fjord and out to Hjálmeiri on the south side, in a zone extending from the coastal line up to the mountain slopes (Map 1). The map shows that "cultivated land" (R) is widespread closest to the place where the smelter is planned. Outside the cultivated areas, "moss heath" (A), "grassland" (H), "dwarf shrub heath" (B, C1) and "wetlands" (U, V) are the most common types of vegetation.

The "moss heath" vegetation was widely distributed in the entire mapped area. However, few areas were covered only with moss without cohabitation by other species. Apart from the mosses, *Empetrum nigrum*, *Vaccinium uliginosum*, *Carex bigelowii*, *Juncus trifidus*, *Kobresia myosuroides* and species of *Festuca* and *Agrostis* were common in the "moss heath".

Several types of "moss heath" vegetation were identified according to the dominating species (Map 1):

- A1 *Racomitrium* spp.
- A3 *Racomitrium* spp. - *Carex bigelowii* - dwarf shrubs
- A4 *Racomitrium* spp. - dwarf shrubs
- A5 *Racomitrium* spp. - *Poaceae*
- A7 *Racomitrium* spp. - *Kobresia myosuroides* - dwarf shrubs

- A8 *Racomitrium* spp. - *Poaceae* - dwarf shrubs
 A31 *Racomitrium* spp. - *Alchemilla alpina* -herbs

Empetrum nigrum is probably the most common species in the "dwarf shrub heath" type of vegetation (B). Other widespread species were *Vaccinium uliginosum*, *Calluna vulgaris*, *Betula nana* and *Salix* spp. *Vaccinium myrtillus* was found in several more sheltered areas. The following types of vegetation were identified within "dwarf shrub heath" land according to the dominating species (Map 1):

- B1 *Empetrum nigrum* - *Betula nana* - *Vaccinium uliginosum*
 B2 *Empetrum nigrum* - *Betula nana* - *Loiseleuria procumens*
 B3 *Empetrum nigrum* - *Salix* spp.
 B4 *Calluna vulgaris* - *Empetrum nigrum* - *Vaccinium uliginosum*
 B6 *Dryas octopetala* - *Empetrum nigrum* - *Salix* spp.
 B7 *Vaccinium uliginosum* - *Empetrum nigrum* - *Salix* spp.
 B9 *Vaccinium myrtillus*
 C1 *Betula nana* - *Vaccinium uliginosum* - *Empetrum nigrum*
 C 2 *Betula nana* - *Kobresia myosuroides* - *Poaceae*
 J1 Lichens - dwarf shrubs

Natural "grasslands" (H) were found along the coastal line, in the lowest part of the hillsides and in several other places. Common in these "grasslands" were species of *Agrostis*, *Deschampsia* and *Festuca*, in snow patches *Nardus stricta* and in coastal grasslands *Puccinellia maritima*. Dwarf shrub species grew in many of the grasslands. The following types of "grassland" were identified (Map 1):

- H1 *Poaceae*
 H2 *Poaceae*- *Carex* spp.
 H3 *Poaceae* - dwarf shrubs
 H5 *Puccinellia maritima*

Cultivated land was found in the areas around farms (Fig. 1). A great part of the cultivated land was "cultivated grassfield" that was not harvested any more. This was the case around Hraun. Horticultural land and forestry were also found. The cultivated land is classified according to utilization. The following types of cultivated land were found:

- R1 Horticultural land
 R2 Cultivated grassfield
 R3 Abandoned cultivated grassfield, not harvested at present, easy to change to cultivated grassfield again.
 R4 Abandoned cultivated grassfield, not harvested at present, difficult to change to cultivated grassfield again.
 R5 Revegetation
 R6 Forestry

The most widespread "wetlands" were found below the mountain slopes. Common species in the wetlands were *Carex nigra*, *Eriophorum angustifolium* and *Equisetum palustre* and in the wettest part *Carex rostrata* and *Carex lyngbyei*. The following types of "wetland" were identified:

- U1 *Carex nigra* - *Carex rariflora*
 U2 *Carex nigra* - *Salix* spp.

- U3 *Carex nigra* - *Betula nana*
- U4 *Carex nigra* - *Eriophorum angustifolium*
- U5 *Carex nigra*
- U10 *Equisetum palustre*
- U 13 *Carex nigra* - *Equisetum palustre*
- U18 *Eriophorum angustifolium* - *Nardus stricta*
- U19 *Carex nigra* - *Carex rostrata*
- V1 *Carex lyngbyei*
- V2 *Carex rostrata*

Several other less common types of vegetation were found in Reyðarfjörður.

"Wood and shrubland" was found in small spots along the hillsides. *Betula pubescens* (C5), *Salix* spp (D3) and *Salix arctica* together with *Betula nana* (D2) were dominant in this type of vegetation. "Sedge and rush heath" was found in small spots. It was dominated by *Kobresia myosuroides* (E1, E2), *Juncus trifidus* (F2) or *Carex bigelowii* (G2) together with dwarf shrubs. In several small areas the vegetation was dominated by small herbs (L1), tall herbs (L2) or stands of introduced *Lupinus nookatensis* (L3). "Moist land" (T) was frequently found, though in small areas. The following types of moist land were identified according to the dominating species.

- T2 *Juncus arcticus* - *Carex* spp - *Poaceae*
- T4 *Salix phyllisifolia* - *Carex* spp - *Poaceae*
- T5 *Carex* spp - *Poaceae*.
- T10 *Juncus arcticus* - *Salix arctica* - *Salix lanata*

"Cultivated grassfield", "grassland" and "moss heath" are the most common types of vegetation within the isoline $1.0 \mu\text{g}/\text{m}^3$ gaseous fluorides for a 120 t/y aluminium smelter (Fig. 2). The "cultivated grassfield" in this area is not harvested any more. Between the $1.0 \mu\text{g}/\text{m}^3$ and $0.2 \mu\text{g}/\text{m}^3$ lines, "moss heath" covers the largest part of the area. Mosses, lichens and *Vaccinium* spp are classified as sensitive species according to Pálmason & Skye (1999). The vegetation types dominated by these are the "moss heath" and "dwarf shrub heath" with *Calluna*, *Vaccinium* and lichens. (Fig. 2)

Within the $1.0 \mu\text{g}/\text{m}^3$ isoline for a 480 t/y aluminium smelter the most common types of vegetation were "moss heath", "cultivated grassfield" and "grassland". Between the $1.0 \mu\text{g}/\text{m}^3$ and $0.2 \mu\text{g}/\text{m}^3$ lines "moss heath", "dwarf shrubs", "wetland", "grassland" and "cultivated grassfield" all covered extensive areas. (Fig. 3)

The area within the $1.0 \mu\text{g}/\text{m}^3$ isoline for a 720 t/y aluminium smelter is almost the same as the area within the $0.2 \mu\text{g}/\text{m}^3$ line for a 120 t/y smelter. The area within the $0.2 \mu\text{g}/\text{m}^3$ isoline for 720 t/y is largest and includes the village at Reyðarfjörður, the tree plantation area around Teigargerði and a small part of the protected area at Hólmanes.

For the 120 t/y smelter the calculated area within the $1.0 \mu\text{g}/\text{m}^3$ isoline was 83.5 ha of land. "Cultivated grassfield" covered proportionally the largest part of that or 39% (20.3 ha), "grassland" covered 23% and "moss heath" 24%. The estimated area in the zone between $0.1 \mu\text{g}/\text{m}^3$ and $0.2 \mu\text{g}/\text{m}^3$ for 120 t/y was 137.7 ha. "Moss heath" covered 36% (50.3 ha) of this zone, "cultivated grassfield" 14% and "grassland" 15%. (Table 2, Fig. 2)

Table 2. The area covered by different types of vegetation and the total land area, within the $1.0\mu\text{g}/\text{m}^3$ and $0.2\mu\text{g}/\text{m}^3$ isolines, for gaseous fluorides for a 120 t/y smelter

Vegetation	Area (ha) within isolines					
	$1.0\mu\text{g}/\text{m}^3$		$1.0\mu\text{g}/\text{m}^3$ $-0.2\mu\text{g}/\text{m}^3$		$0.2\mu\text{g}/\text{m}^3$	
	ha	%	ha	%	ha	%
Moss heath	20.3	24	50.4	36	70.7	32
Cultivated grassfield	32.3	39	20.0	14	52.3	24
Grassland	19.1	23	21.3	15	40.4	18
Unvegetated land	3.6	4	11.9	9	15.5	7
Dwarf shrubs w. <i>Calluna</i> , <i>Vaccinium</i> and lichens	0.1	<1	14.0	10	14.2	6
Dwarf shrubs w. <i>Empetrum</i> , <i>Dryas</i> and <i>Betula nana</i>	2.9	3	10.6	8	13.5	6
Moist land	3.9	5	3.8	3	7.7	3
Wetland	0.1	<1	3.8	3	3.9	2
Herbs		0	0.6	<1	0.6	<1
Horticultural land		0	0.2	<1	0.2	<1
Sedge and rush heath	1.2	1	1.0	<1	2.2	<1
Total	83.5		137.7		221.2	

For a 480 t/y aluminium smelter, the land area within $1.0\mu\text{g}/\text{m}^3$ was 212.5 ha. "Moss heath" covered the proportionally largest part or 30% (64.5 ha), while cultivated land and "grassland" covered 25% and 19% respectively. The calculated land area in the zone within the $1.0\mu\text{g}/\text{m}^3$ and $0.2\mu\text{g}/\text{m}^3$ borders for a 480 t/y smelter was 616.6 ha. "Moss heath" covers proportionally the largest part of it also or 32% (196.9 ha). "Grassland" and "wetland" cover 18% and 13% respectively.

Table 3. The area covered by different types of vegetation and the total area of land within the $1.0\mu\text{g}/\text{m}^3$ and $0.2\mu\text{g}/\text{m}^3$ isolines for gaseous fluorides for a 480 t/y smelter

Vegetation	Area (ha) within isolines					
	$1.0\mu\text{g}/\text{m}^3$		$1.0\mu\text{g}/\text{m}^3$ $-0.2\mu\text{g}/\text{m}^3$		$0.2\mu\text{g}/\text{m}^3$	
	ha	%	ha	%	ha	%
Moss heath	64.9	30.2	196.9	32	261.8	32
Grassland	40.7	19	113.0	18	153.7	18
Wetland	5.1	2	77.9	13	83.0	10
Cultivated grassfield	53.3	25	53.0	8	106.3	13
Dwarf shrubs w. <i>Calluna</i> , <i>Vaccinium</i> and lichens	10.5	5	48.2	8	58.7	7
Dwarf shrubs w. <i>Empetrum</i> , <i>Dryas</i> and <i>Betula nana</i>	16.1	8	45.1	7	61.2	7
Sedge and rush heath	2.1	<1	22.1	4	24.2	3
Moist land	7.4	3	16.4	3	23.8	3
Herbs	0.6	<1	1.7	<1	2.3	<1
Wood and shrubland			3.3	<1	3.3	<1
Horticultural land	0.2	<1	1.0	<2	1.2	<1
Unvegetated land	11.4	5	37.7	6	49.1	6
Total	212.3		616.4		828.7	

A map of the total cover of vegetation on the land surface shows that large areas are not fully vegetated. In quite a considerable part the vegetation covers a mere 1/3 or less of the surface (Fig. 4).

In the area around Hraun (Flateyri-Björg), 190 species of higher plants were recorded in this study (Appendix A). No red-listed, rare or protected species were found in the area around Hraun. A red-listed species (*Rosa pipinellifolia*) has been found around Kollaleira west of the village Reyðarfjörður. Of mosses 99 species were found (Appendix B), along with 89 lichen species (Appendix C). Though it was not possible to identify all the lichen species, samples will be stored.

An estimate of the proportional cover of different plant species and of species composition in the "moss heath" showed that the most common species was *Racomitrium lanuginosum*. Other common species were *Empetrum nigrum* and *Vaccinium uliginosum*. The vegetation was dwarfish, with the proportion of bare ground considerable. The cover of mosses varied from about 20 to 70%. A number of species with low abundance were found in this type of vegetation. (Appendix D, transect 1, 3, 9, 10, 12)

In the "dwarf shrub heath" the estimate of cover was made at two locations. *Empetrum nigrum* and *Vaccinium uliginosum* were the most common species, with coverage around 50%. Other common species occurring in this type of vegetation were *Calluna vulgaris*, *Betula nana*, *Salix* spp and grasses. The cover of mosses was about 20-30%. (Appendix D, transect 2,4)

Agrostis capillaris, *Festuca vivipara*, *Dechampsia caespitosa* and *D. flexuosa* were all common in the "grassland" type. The cover of the grasses was 8- 25%. Other species commonly found in the "grassland" were *Empetrum nigrum* and *Salix* spp. More grass species and a number of herbs were also found in the "grassland". The cover of mosses was very variable between locations. (Appendix D, transect 5, 7 and 11)

Betula nana covered 9%, *Vaccinium uliginosum* and *Empetrum nigrum* 12%, *Carex nigra* 8% and mosses 23% in one measurement in "wetland". In another wetland measurement *Vaccinium uliginosum* covered 5%, *Salix* spp 9%, *Equisetum* spp 7% and moss 78%. (Appendix D, transect 6 and 8)

Discussion

Types of vegetation

"Cultivated grassfields" are located around the farms in Reyðarfjörður. Around the abandoned farms of Flateyri, Hraun (Staðarhraun), Sómastaðir and Sómastaðagerði, in the Hraun area, the grassfields have not been harvested for several years. The grassfield around the still inhabited farm Framnes is not harvested either. Around Flateyri and Hraun the grassfields are used for horse grazing. The "cultivated grassfields" around Hólmar and Teigargerði are harvested at the present, as are the grassfields around the farms west of the village Reyðarfjörður.

"Moss heath" is widely distributed in the mapped area. This type of vegetation covers dry, exposed areas with thin or negligible soil. In several places the moss vegetation covers

broad areas. Usually, however, the "moss heath" is patchy, intermingled with sparsely vegetated areas, bare cliffs and stones or other types of vegetation like "dwarf shrub heath". The most common moss species in the "moss heath" is *Racomitrium lanuginosum*. In Reyðarfjörður the "moss heath" usually contains more plants than mosses although mosses are most abundant. Species of dwarf shrubs, grasses, sedge, rush, or herbs commonly characterise the "moss heath". The total number of species was rather high in the "moss heath", although most species have a very low abundance. (Appendix D, 1,3,9,10,12)

"Dwarf shrub heath" was found throughout most of the mapped area. It was found on hill slopes and heathlands that are less exposed than the "moss heath". In Reyðarfjörður the "dwarf shrub heath" rarely covers large unbroken areas. Several types of vegetation are classified as "dwarf shrub heath". *Empetrum nigrum*, *Calluna vulgaris* or *Loiseleuria procumbens* dominate in the more barren areas. *Vaccinium myrtillus* grows in the most sheltered areas that are covered with snow during the winter, while *Betula nana* and *Vaccinium uliginosum* are dominant in moderately exposed areas. Lichens are dominant or at least common in several rather small areas, especially towards the innermost end of the valley. Lichen-dominated vegetation was on the other hand rare around Hraun (Map 1). Quite many species of grass and herbs generally grow in the "dwarf shrub heath," although most of them have a low abundance. (Appendix D 1,3, 9, 10, 12)

Natural "grassland" is scattered throughout the whole area, although it seldom covers large uninterrupted areas. It is commonly found on dry banks along the coast and in the lowest part of the mountain slopes on old landslides where the soil is sandy e.g. above Sómastaðir and Hraun. Small spots of natural "grassland" are also scattered in the heath land making a mosaic with the "dwarf shrub heath" and the "moss heath" vegetation. In addition to the dominating grass species a number of species of herbs and dwarf shrub species were found in these grasslands. (Appendix D 5, 7, 11)

The largest areas of "wetland" in Reyðarfjörður are beneath the mountain slopes, above rock ridges. Most of the other parts of the mapped area are rather dry, although small spots of "wetland" were found in several places of other sorts. "Moist land" has rather heterogeneous vegetation. It is frequently found on small spots in Reyðarfjörður.

"Wood and shrubland" is mainly found in the lower part of the mountain slopes and partly outside the mapped area. It consists of about one-metre-high shrubs of *Betula pubescens*, *Salix arctica* and *Salix lanata*.

To sum up: "Cultivated grassfields" extend around the farms, relatively large "wetland" areas are found beneath the mountain slopes, and "grasslands" commonly follow the coastline. Other parts of the investigated area are covered with heathland vegetation. The heath land in Reyðarfjörður is usually a mosaic of different types of vegetation. The "moss heath" dominates on the most exposed parts where the soil is usually thinnest. "Dwarf shrub heath", natural "grassland" and in several places "sedge or rush heath" are usually found on the less exposed areas where soil is thicker.

No rare or extraordinary types of vegetation were found in the area. Nevertheless the value of the land and the vegetation should not be underestimated. The wetlands found in this study are undisturbed. All undisturbed wetlands have a nature conservation value,

because very many wetlands have been drained and dried in Iceland over the last decades. Large areas of Reyðarfjörður are completely covered with vegetation, although sparsely vegetated areas occur also. Fully vegetated land is valuable in such a heavily eroded country as Iceland.

Vegetation cover

Mosses are very common in many of the vegetation types that were identified in this study. In the "dwarf shrub heath" and the "wetland", mosses are usually abundant. Taller plants compose more or less continuous cover above the moss in these types of vegetation, while moss makes up a second cover beneath the taller plants. In the "moss heath", moss frequently provides almost the only cover to the surface although a number of other species are present.

Eroded cliffs, gravel flats and landslides are commonly found in Reyðarfjörður. Especially in the heath land, the vegetation is sparse or discontinuous. The proportion of bare ground is therefore considerable in heath lands and mountain slopes. Nevertheless, few signs were seen of ongoing erosion. Instead, the vegetation shows signs of increasing. In areas with clear marks of earlier erosion the vegetation appears to be recovering. The low grazing pressure of the last 10 years might be the explanation. Ten years ago (1988), all sheep in Reyðarfjörður were slaughtered because of an infectious disease. Sheep were allowed again in 1991 but have only been kept at the farms Kollaleira and Slétta.

The plant species

No species of higher plants, lichens or moss found in the Hraun area are listed in the red list nor protected by law (Válisti I 1996). However, several of the species of higher plants found in the research area have limited distribution in Iceland. Distribution of *Alchemilla faeroensis*, *Campanula rotundifolia*, *Saxifraga azoides*, *Saxifraga cotyledon* and *Trientalis europea* is limited to eastern Iceland. *Carex glacialis* and *Erophila verna* belong to the northeast part of Iceland. *Juncus castaneus* is found in eastern and western Iceland. *Linum chatarcticum*, *Saxifraga paniculata* and *Veronica officinalis* are sparsely distributed around Iceland. Other research reports no records of rare or red-listed species in the research area from Flateyri to Björg (The Icelandic Institute of Natural History, unpublished). The ferns *Dryopteris filix-mas* and *Athyrium distentifolium* have been found in Urðarhvammur and in Hólmaborgir at the protected area of Hólmanes (The Icelandic Institute of Natural History, unpublished). Though not red listed, these fern species have a limited distribution in Iceland and are only found where snow cover is heavy during the winter. The rare and red-listed *Rosa pinpinellifolia* grows near the farm Kollaleira (Þórarinnsson et al. 1984, personal obs.). The very rare species *Vaccinium vitis-idea* has been found outside the mapped area in Breiðdalur and Hafnarnes-Kolmúli on the south side of Reyðarfjörður (Thorarinnsson et al. 1994, The Icelandic Institute of Natural History, unpublished).

Species of higher plants in the research area are highly diverse relative to what is common in Iceland. Thorarinnsson et al. (1984) recorded fewer species around Hraun in 1983. The higher number of species found now probably indicates a rising diversity because of low grazing pressure. Species which are tasty to grazing animals like *Angelica* are now common but were not recorded around Hraun in the earlier study (Thorarinnsson et al. 1984). It should be pointed out that in the present research botanists that are not specialised in mosses and lichens performed most of the collection of them in the field.

The cover of plant species

Measurements of the cover of species in the field are very time consuming. Therefore, they focused in this case on the vegetation types that were believed to be most important to describe. The chosen sampling sites are located in the most common types of plant communities, and where the dominating species vary regarding their sensitivity to emissions from aluminium smelters. In the "moss heath" the dominating moss (*Racomitrium*) is sensitive to airborne fluorides, but some of the other species that are common in this type of vegetation are tolerant, e.g. crowberries (*Empetrum nigrum*) and dwarf birch (*Betula nana*) (Kristinsson 1998, Pálmason & Skye 1999). In the types of vegetation that cover small areas like sedge or rush heath (E, F, G) and in moist land (T), or where all the dominating species are classified similarly regarding their sensitivity e.g. "cultivated grassfield" (R), no measurements of cover were made.

Measurements of cover aimed to describe the species composition and proportional cover of common types of vegetation. These measurements had to be made before the vegetation map was prepared. The selection of the sampling locations could therefore not be based on the map, which would have been desirable to assure that the sampling locations be representative for the main types of plant communities in the area. The vegetation map also shows a rather high diversity of subtypes (e.g. A1, A3, A4, A5) within each main type (i.e. A = "moss heath") of vegetation. This means that numerous measurements would have been needed to describe the variability within each main type of vegetation. The measurements of cover for different species should therefore not be interpreted as a fully reliable description, but rather as a hint of the possible situation for each type of vegetation, which also gives valuable information about the diversity of species in the plant communities. All the plots that were used for the measurements of cover were marked, providing an opportunity to repeat the measurements later.

Utilization

At present, the investigated area is not important for the grazing of sheep and cows, though horses range there. Wild reindeer occasionally forage in the area, especially during the winter. The situation was different several years ago when all the farms in the area were inhabited and sheep, horses and cows were raised there. Flateyri has been abandoned since 1974, Sómastaðir and Sómastaðagerði since 1982. Hólmar and Framnes are still inhabited; Hraun was until 1993. Horses are kept at Flateyri and Hraun (Sveitir og jarðir í Múlaþingi 1995, Guðmundur Beck, personal com.).

Several old kitchen gardens were found in the area. Nearest to Teigagerði, some of these are cultivated at the present. In most of these potatoes have been grown. At the farm Sómastaðir a plant nursery is now operated. A foresting area is planned in the Teigagerði area, where small trees have recently been planted. As pointed out by Pálmason & Skye (1999), conifers might be affected in the dilution zones.

The investigated land might seem barren and unsuitable for outdoor recreation and experiences in nature. Nevertheless, many beautiful places in regard to vegetation and landscape can be found throughout the area, such as the sheltered slopes of the mountains beneath the cliff walls, along small streams or between rocks, where the vegetation is often luxuriant. Along the coast numerous other beautiful places can be found, with nicely

vegetated banks above grey coastal sand or cliffs. Proximity to the village of Reyðarfjörður also makes the coast accessible to people.

Crowberries (*Empetrum nigrum*) are found in large amounts in the heath land in Reyðarfjörður during late summer, but less of blueberries (*Vaccinium uliginosum* and *V. myrtillus*). Both of these are commonly picked in Iceland for making jam or juice, which is probably also done in the neighbourhood of Hraun.

The effect of emissions

According to Pálmason and Skye (1999) threshold limits of SO² for vascular plants are not exceeded by the SO₂ concentrations that the model calculations (Guerreiro 1998) predict in the air, but negative effects on mosses and lichens might occur right near the smelter.

Pálmason and Skye (1999) also conclude it to be unlikely that plants and vegetation will be affected by emissions from an aluminium smelter at lower concentrations than 0.2 µg/m³ F. In the outer zone of dispersion (1.0 µg/m³ - 0.2 µg/m³) sensitive plants may be affected by the emission of fluorides. Detectable effects can thus be expected in this zone. In the inner zone mosses and lichens may be damaged or destroyed beside the smelter, along with sensitive higher plants being damaged to an increasing degree. Intermediately susceptible plants may develop symptoms in the inner zone (Pálmason & Skye 1999). Visible effect on the vegetation can therefore be expected in this zone.

Of the vegetation types found in Reyðarfjörður, several are dominated by species classified as sensitive to airborne fluorides (Pálmason & Skye 1999). The most common of the types dominated by sensitive species are the "moss heath" and the "dwarf shrub heath" with *Calluna*, *Vaccinium* or lichens. The "moss heath" covered 24-36%, and the "dwarf shrub heath", with *Calluna*, *Vaccinium* or lichens, from 1 -10% of the area within the different dilution zones (Tables 2 and 3). For further discussion of the effects of different concentrations of fluorides on the vegetation see Pálmason and Skye 1999.

The placement on the map of the isolines for concentration of gaseous fluorides and the calculation of the area within the chosen limits should be interpreted with caution. Firstly, the lines are based on meteorological data from only 6 months, which might be too short a period of time to describe the weather situation adequately. Secondly, the map that was used as a basis for the calculation of the lines was only a rough one, and the margins of error in the calculations make an exact placing meaningless (Guerreiro, personal com.). Thirdly, as pointed out by Pálmason & Skye (1999), estimating the susceptibility of the vegetation to airborne fluorides is very difficult. The maps presented in this report showing the area within the isolines and the calculations of the land affected by emissions may therefore not be interpreted as an exact prediction of which areas will be affected if a smelter is built. The maps are only one way to describe the order of magnitude of the effects of emissions on the vegetation in the area around Hraun, for a given set of conditions.

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Species of higher plants found around Hraun (Björg - Flateyri) in 1998.
Names according to Kristinsson (1986) and Pálsson (1997).

Latin name	Icelandic name
<i>Achillea millefolium</i>	Vallhumall
<i>Agrostis capillaris</i>	Hálingresi
<i>Agrostis stolonifera</i>	Skriðlingresi
<i>Agrostis vernalis</i>	Títulingresi
<i>Alchemilla alpina</i>	Ljónslappi
<i>Alchemilla faeroensis</i>	Mariuvöttur
<i>Alchemilla vulgaris</i>	Mariustakkur
<i>Alopecurus aequalis</i>	Vatnsliðagras
<i>Alopecurus geneculatus</i>	Knjáliðagras
<i>Alopecurus pratensis</i>	Háliðagras
<i>Angelica archangelica</i>	Ætihvönn
<i>Angelica sylvestris</i>	Geithvönn
<i>Anthoxanthum odoratum</i>	Ilmreyr
<i>Arctostaphylos uva-ursi</i>	Sortulyng
<i>Arenaria norvegica</i>	Skeggsandi
<i>Armeria maritima</i>	Geldingahnappur
<i>Atriplex glabriuscula</i>	Hélublaðka
<i>Bartsia alpina</i>	Smjörgras
<i>Betula nana</i>	Fjalldrapi
<i>Betula pubescens</i>	Birki
<i>Bistorta vivipara</i>	Kornsúra
<i>Botrychium lunaria</i>	Tungljurt
<i>Calamagrostis stricta</i>	Hálmgresi
<i>Calluna vulgaris</i>	Beitilyng
<i>Caltha palustris</i>	Hófsóley
<i>Campanula rotundifolia</i>	Bláklukka
<i>Capsella bursa-pastoris</i>	Hjartarfi
<i>Cardamine nymanii</i>	Hrafnaklukka
<i>Cardaminopsis petraea</i>	Melablóm
<i>Carex atrata</i>	Sótstör
<i>Carex bigelowii</i>	Stinnastör
<i>Carex capillaris</i>	Hárleggjastör
<i>Carex capitata</i>	Hnappstör
<i>Carex chordorrhiza</i>	Vetrarkvíðastör
<i>Carex curta</i>	Blátoppastör

<i>Carex dioica</i>	Sérbýlisstör
<i>Carex glacialis</i>	Dvergstör
<i>Carex glareosa</i>	Heigulstör
<i>Carex krausei</i>	Toppastör
<i>Carex lyngbyei</i>	Gulstör
<i>Carex maritima</i>	Bjúgstör
<i>Carex mackenziei</i>	Skriðstör
<i>Carex microglochin</i>	Broddastör
<i>Carex nigra</i>	Mýrastör
<i>Carex norvegica</i>	Fjallastör
<i>Carex panicea</i>	Belgjastör
<i>Carex rariflora</i>	Hengistör
<i>Carex rostrata</i>	Tjarnastör
<i>Carex saxatilis</i>	Hrafnastör
<i>Carex subspathacea</i>	Flæðastör
<i>Carex vaginata</i>	Slíðrastör
<i>Cassiope hypnoides</i>	Mosalýng
<i>Cerastium alpinum</i>	Músareyra
<i>Cerastium cerastoides</i>	Lækjafræhyrna
<i>Cerastium fontanum</i>	Vegarfi
<i>Chochlearia officinalis</i>	Skarfakál
<i>Coeloglossum viride</i>	Barnarót
<i>Corallorhiza trifida</i>	Kræklurót
<i>Cystopteris fragilis</i>	Tófugras
<i>Dactylorhiza maculata</i>	Brönugrös
<i>Deschampsia alpina</i>	Fjallapuntur
<i>Deschampsia caespitosa</i>	Snarrótarpuntur
<i>Deschampsia flexuosa</i>	Bugðupuntur
<i>Draba incana</i>	Grávorblóm
<i>Draba norvegica</i>	Hagavorblóm
<i>Dryas octopetala</i>	Holtasóley
<i>Elymus repens</i>	Húsapuntur
<i>Empetrum nigrum</i>	Krækilyng
<i>Epilobium alsinifolium</i>	Lindadúnurt
<i>Euphrasia frigida</i>	Augnfró
<i>Epilobium angustifolium</i>	Sigurskúfur
<i>Epilobium hornemanni</i>	Heiðadúnurt

<i>Epilobium latifolium</i>	Eyrarrós
<i>Epilobium palustre</i>	Mýradúnurt
<i>Equisetum arvense</i>	Klóelfting
<i>Equisetum hiemale</i>	Eski
<i>Equisetum palustre</i>	Mýrelfting
<i>Equisetum pratense</i>	Vallelfting
<i>Equisetum variegatum</i>	Beitieski
<i>Erigeron borealis</i>	Jakobsfífill
<i>Eriophorum angustifolium</i>	Klófífa
<i>Eriophorum scheuchzeri</i>	Hrafnafífa
<i>Erophila verna</i>	Vorperla
<i>Festuca rubra</i>	Túnvingull
<i>Festuca vivipara</i>	Blávingull
<i>Galium normanii</i>	Hvítmaðra
<i>Galium verum</i>	Gulmaðra
<i>Gentiana nivalis</i>	Dýragras
<i>Gentianella amarella</i>	Grænvöndur
<i>Gentianella campestris</i>	Mariúvöndur
<i>Geranium sylvaticum</i>	Blágresi
<i>Geum rivale</i>	Fjalldalafífill
<i>Hieracium spp</i>	Undaffífill
<i>Hierochloe odorata</i>	Reyrgresi
<i>Honckenya peploides</i>	Fjöruarfi
<i>Huperzia selago</i>	Skollafingur
<i>Juncus alpinus</i>	Mýrasef
<i>Juncus arcticus</i>	Hrossanál
<i>Juncus biglumis</i>	Flagasef
<i>Juncus castaneus</i>	Dökkasef
<i>Juncus filiformis</i>	Þráðsef
<i>Juncus ranarius</i>	Lindasef
<i>Juncus trifidus</i>	Móasef
<i>Juncus triglumis</i>	Blómsef
<i>Juniperus communis</i>	Einir
<i>Kobresia myosuroides</i>	Þursaskegg
<i>Koenigia islandica</i>	Naflagras
<i>Leontodon autumnalis</i>	Skarífífill
<i>Leymus arenarius</i>	Melgresi
<i>Linum catharticum</i>	Villilín

<i>Loiseleuria procumbens</i>	Sauðamergur
<i>Lupinus nootkatensis</i>	Alaskalúpína
<i>Luzula multiflora</i>	Vallhæra
<i>Luzula spicata</i>	Axhæra
<i>Lychnis alpina</i>	Ljósberi
<i>Matricaria maritima</i>	Baldursbrá
<i>Menyanthes trifoliata</i>	Horblaðka
<i>Mertensia maritima</i>	Blálilja
<i>Montia fontana</i>	Lækjagrýta
<i>Myosotis arvensis</i>	Gleym-mér-ey
<i>Nardus stricta</i>	Finnungur
<i>Oxyria digyna</i>	Ólafssúra
<i>Papaver radicum</i>	Melasól
<i>Parnassia palustris</i>	Mýrasóley
<i>Phleum alpinum</i>	Fjallafoxgras
<i>Phleum pratense</i>	Vallarfoxgras
<i>Pilosella islandica</i>	Íslandsfiifill
<i>Pinguicula vulgaris</i>	Lyfjagras
<i>Plantago maritima</i>	Kattartunga
<i>Platanthera hyperborea</i>	Friggjargras
<i>Poa alpina</i>	Fjallasveifgras
<i>Poa annua</i>	Varpasveifgras
<i>Poa glauca</i>	Blásveifgras
<i>Poa pratensis</i>	Vallarsveifgras
<i>Polygonum aviculare</i>	Blóðarfi
<i>Polystichum lonchitis</i>	Skjaldburkni
<i>Potentilla anserina</i>	Tágamura
<i>Potentilla crantzii</i>	Gullmura
<i>Potentilla palustris</i>	Engjarós
<i>Pseudorchis albida</i>	Hjónagras
<i>Pyrola minor</i>	Klukkublóm
<i>Ranunculus acris</i>	Brennisóley
<i>Ranunculus reptans</i>	Flagasóley
<i>Rhinanthus minor</i>	Lokasjóður
<i>Rhodiola rosea</i>	Burnirót
<i>Rubus saxatilis</i>	Hrútaber
<i>Rumex acetosa</i>	Túnsúra
<i>Rumex acetosella</i>	Hundasúra

<i>Rumex longifolius</i>	Njóli
<i>Sagina nodosa</i>	Hnúskakrækill
<i>Sagina procumbens</i>	Skammkrækill
<i>Salix arctica</i>	Fjallavíðir
<i>Salix herbacea</i>	Grasvíðir
<i>Salix lanata</i>	Loðvíðir
<i>Salix phylicifolia</i>	Gulvíðir
<i>Saxifraga aizoides</i>	Gullsteinbrjótur
<i>Saxifraga caespitosa</i>	Þúfusteinbrjótur
<i>Saxifraga cotyledon</i>	Klettafrú
<i>Saxifraga hirculus</i>	Gullbrá
<i>Saxifraga hypnoides</i>	Mosasteinbrjótur
<i>Saxifraga nivalis</i>	Snæsteinbrjótur
<i>Saxifraga oppositifolia</i>	Vetrarblóm
<i>Saxifraga paniculata</i> -	Bergsteinbrjótur
<i>Saxifraga stellaris</i>	Stjörnusteinbrjótur
<i>Sedum acre</i>	Helluhnoðri
<i>Sedum annuum</i>	Skriðuhnoðri
<i>Sedum villosum</i>	Flagahnoðri
<i>Selaginella selaginoides</i>	Mosajafni
<i>Silene acaulis</i>	Lambagras
<i>Silene uniflora</i>	Holurt
<i>Spergula arvensis</i>	Skurfa
<i>Stellaria crassifolia</i>	Stjörnuarfi
<i>Stellaria media</i>	Haugarfi
<i>Taraxacum spp.</i>	Túnfífill
<i>Thalictrum alpinum</i>	Brjóstagras
<i>Thymus praecox</i>	Blóðberg
<i>Tofieldia pusilla</i>	Sýkigras
<i>Trichophorum caespitosum</i>	Mýrafinnungur
<i>Trientalis europaea</i>	Sjöstjarna
<i>Trifolium repens</i>	Hvítsmári
<i>Triglochin palustre</i>	Mýrasauðlaukur
<i>Trisetum spicatum</i>	Lógresi
<i>Vaccinium myrtillus</i>	Aðalbláberjalyng
<i>Vaccinium uliginosum</i>	Bláberjalyng
<i>Veronica alpina</i>	Fjalladepla
<i>Veronica fruticans</i>	Steindepla

<i>Veronica officinalis</i>	Hárdepla
<i>Veronica serpyllifolia</i>	Lækjadepla
<i>Vicia cracca</i>	Umfeðmingur
<i>Viola canina</i>	Týsfjóla
<i>Viola palustris</i>	Mýrfjóla

Species of moss found around Hraun (Björg-Flateyri) in 1998.

Latin name	Icelandic name
<i>Andreaea rupestris</i> Hedw.	Holtasóti
<i>Aneura pinguis</i> (L.) Dum.	Fleðumosi
<i>Aulacomnium palustre</i> (Hedw.) Schwägr.	Bleikjukollur
<i>Aulacomnium turgidum</i> (Wahlenb.) Schwägr.	Bústinkollur
<i>Barbilophozia hatcheri</i> (Evans) Loeske	Urðalarfi
<i>Barbilophozia kunzeana</i> (Hüb.) K. Müll.	Mýralarfi
<i>Barbilophozia quadriloba</i> (Lindb.) Loeske	Vætularfi
<i>Blepharostoma trichophyllum</i> (L.) Dum.	Hýmosi
<i>Blindia acuta</i> (Hedw.) Bruch et Schimp.	Almosi
<i>Brachythecium albicans</i> (Hedw.) Schimp.	Götulokkur
<i>Brachythecium rivulare</i> Schimp.	Lækjalokkur
<i>Bryum pseudotriquetrum</i> (Hedw.) Gärtn. et al.	Kelduhnokki
<i>Bryum salinum</i> Limpr.	Fjöruhokki
<i>Calliergon giganteum</i> (Schimp.) Kindb.	Tjarnahrókur
<i>Calliergon richardsonii</i> (Mitt.) Kindb.	Flóahrókur
<i>Calliergonella cuspidata</i> (Hedw.) Loeske	Geirsnuddi
<i>Calliergonella lindbergii</i> (Mitt.) Heden.	Bugsnuddi
<i>Campyliadelphus chrysophyllus</i> (Brid.) Kanda	Klettatjása
<i>Campylium stellatum</i> (Hedw.) J. Lange et C. Jens.	Mýrabrandur
<i>Cephalozia bicuspidata</i> (L.) Dum.	Vætukrýli
<i>Cephaloziella hampeana</i> (Nees) Schiffn.	Vætuvæskill
<i>Ceratodon purpureus</i> (Hedw.) Brid.	Hlaðmosi
<i>Chiloscyphus polyanthos</i> (L.) Corda	Lækjareifi
<i>Cinclidium stygium</i> Sw.	Keldudepill
<i>Climacium dendroides</i> (Hedw.) Web.et Mohr	Krónumosi
<i>Ctenidium molluscum</i> (Hedw.) Mitt.	Urðaglæsa
<i>Dichodontium pellucidum</i> (Hedw.) Schimp.	Glætumosi
<i>Dicranella palustris</i> (Dicks.) E. Warb.	Lindarindill
<i>Dicranoweisia crispula</i> (Hedw.) Milde	Kármosi
<i>Dicranum bonjeanii</i> De Not.	Mýrabrúskur
<i>Dicranum flexicaule</i> Brid.	Holtabrúskur
<i>Dicranum scoparium</i> Hedw.	Móabrúskur
<i>Dicranum spadiceum</i> Zett.	Hagabrúskur
<i>Distichium capillaceum</i> (Hedw.) Bruch et Schimp.	Þráðmækir
<i>Ditrichum crispatissimum</i> (C. Müll.) Par.	Giljavendill

<i>Ditrichum flexicaule</i> (Schwägr.) Hampe	Hagavendill
<i>Fissidens adianthoides</i> Hedw.	Mýrfjöður
<i>Fissidens osmundoides</i> Hedw.	Vætufjöður
<i>Grimmia donniana</i> Sm.	Holtaskeggi
<i>Grimmia funalis</i> (Schwägr.) Bruch et Schimp.	Snúinskeggi
<i>Grimmia montana</i> Bruch et Schimp.	Hlíðaskeggi
<i>Grimmia ovalis</i> (Hedw.) Lindb.	Bakkaskeggi
<i>Homalothecium sericeum</i> (Hedw.) Schimp.	Klettaprýði
<i>Hylocomium splendens</i> (Hedw.) Schimp.	Tildurmosi
<i>Lophozia bantriensis</i> (Hook.) Steph.	Mýralápur
<i>Lophozia rutheana</i> (Limpr.) Howe	Keldulápur
<i>Lophozia sudetica</i> (Hüb.) Grolle	Lautalápur
<i>Lophozia ventricosa</i> (Dick.) Dum.	Urðalápur
<i>Marchantia polymorpha</i> L.	Stjörnumosi
<i>Meesia triquetra</i> (Richter) Ångstr.	Keldusnoppa
<i>Meesia uliginosa</i> Hedw.	Vætusnoppa
<i>Myurella julacea</i> (Schwägr.) Schimp.	Syllureim
<i>Odontoschisma macounii</i> (Aust.) Underw.	Heiðagepill
<i>Oncophorus virens</i> (Hedw.) Brid.	Eyrahnúði
<i>Paludella squarrosa</i> (Hedw.) Brid.	Rekilmosi
<i>Palustriella falcata</i> (Brid.) Heden.	Kelduskrápur
<i>Pellia neesiana</i> (Gott.) Limpr.	Vætublaðka
<i>Philonotis fontana</i> (Hedw.) Brid.	Dýjahnappur
<i>Philonotis seriata</i> Mitt.	Lækjahnappur
<i>Plagiochila porelloides</i> (Nees) Lindenb.	Sniðmosi
<i>Plagiomnium elatum</i> (Bruch et Schimp.) T. Kop.	Deiglubleðill
<i>Plagiomnium ellipticum</i> (Brid.) T. Kop.	Mýrableðill
<i>Pleurozium schreberi</i> (Brid.) Mitt.	Hrísmosi
<i>Pogonatum urnigerum</i> (Hedw.) P. Beauv.	Melhöttur
<i>Pohlia cruda</i> (Hedw.) Lindb.	Urðaskart
<i>Pohlia nutans</i> (Hedw.) Lindb.	Móaskart
<i>Pohlia wahlenbergii</i> (Web. et Mohr) Andr.	Lindaskart
<i>Polytrichastrum alpinum</i> (Hedw.) G.L. Sm.	Fjallalubbi
<i>Polytrichum piliferum</i> Hedw.	Gráhaddur
<i>Pseudobryum cinclidioides</i> (Hüb.) T.Kop.	Skjallmosi
<i>Ptilidium ciliare</i> (L.) Hampe	Móatrefja
<i>Racomitrium canescens</i> (Hedw.) Brid.	Hærugambri
<i>Racomitrium ericoides</i> (Brid.) Brid.	Melagambri

<i>Racomitrium fasciculare</i> (Hedw.) Brid.	Snoðgambri
<i>Racomitrium heterostichum</i> (Hedw.) Brid.	Silfurgambri
<i>Racomitrium lanuginosum</i> (Hedw.) Brid.	Hraungambri
<i>Rhizomnium magnifolium</i> (Horik.) T.Kop.	Lindafaldur
<i>Rhytidiadelphus squarrosus</i> (Hedw.) Warnst.	Engjaskraut
<i>Rhytidium rugosum</i> (Hedw.) Kindb.	Rjúpumosi
<i>Riccardia chamedryfolia</i> (With.) Grolle	Pollabendill
<i>Sanionia uncinata</i> (Hedw.) Loeske	Móasigð
<i>Scapania degenii</i> K.Müll.	Vætuleppur
<i>Scapania irrigua</i> (Nees) Nees	Mýraleppur
<i>Scapania undulata</i> (L.) Dum.	Lækjaleppur
<i>Schistidium confertum</i> (Funck) Bruch et Schimp.	Gullinkragi
<i>Schistidium papillosum</i> Culm.	Vörtukrgi
<i>Schistidium strictum</i> (Turn.) Mårt.	Bollakragi
<i>Scorpidium cossonii</i> (Schimp.) Heden.	Lindakrækja
<i>Scorpidium revolvens</i> (Anon.) Rubers	Mýrakraekja
<i>Sphagnum subnitens</i> Russ. et Warnst.	Fjóluburi
<i>Sphagnum teres</i> (Schimp.) Ångstr.	Bleytuburi
<i>Sphagnum warnstorffii</i> Russ.	Rauðburi
<i>Straminergon stramineum</i> (Brid.) Heden.	Seilmosi
<i>Syntrichia ruralis</i> (Hedw.) Web. et Mohr	Hæruskúfur
<i>Tomentypnum nitens</i> (Hedw.) Loeske	Lémosi
<i>Tritomaria polita</i> (Nees) Jörg.	Glæhaki
<i>Tritomaria quinqueidentata</i> (Huds.) Buch	Skáhaki
<i>Warnstorffia exannulata</i> (Schimp.) Loeske	Lindakló
<i>Warnstorffia sarmentosa</i> (Wahlenb.) Heden.	Roðakló

Species of lichen found around Hraun (Björg-Flateyri) in 1998.

Latin name	Icelandic name
<i>Alectoria nigricans</i> (Ach.) Nyl.	Surtarkræða
<i>Amygdalaria pelobotryon</i> (Wahlenb. in Ach.) Norm.	
<i>Arthrorhaphis alpina</i> (Schaer.) R.Sant.	
<i>Aspicilia cinerea</i> (L.) Körb.	Gráskorpa
<i>Baeomyces rufus</i> (Huds.) Rebert.	Torfmærna
<i>Brigantiaea fuscolutea</i> (Dicks.) R.Sant.	
<i>Caloplaca crenularia</i> (With.) Laundon	Ryðmerla
<i>Candelariella placodizans</i> (Nyl.) Magn.	Sliturglæta
<i>Candelariella vitellina</i> (Hoffm.) Müll.Arg.	Toppaglæta
<i>Catapyrenium lachneum</i> (Ach.) R.Sant.	
<i>Catillaria contristans</i> (Nyl.) Zahlbr.	
<i>Cetraria aculeata</i> (Schreb.) Fr. .	Melakræða
<i>Cetraria islandica</i> (L.) Ach.	Fjallagrös
<i>Cetraria muricata</i> (Ach.) Eckfelt	
<i>Chromatochlamys muscorum</i> (Fr.) Th.Fr	
<i>Cladonia arbuscula</i> (Wallr.) Flot.	Hreindýrakraókar
<i>Cladonia borealis</i> Stenroos	Skarlatbikar
<i>Cladonia caespiticia</i> (Pers.) Flörke	
<i>Cladonia cervicornis</i> (Ach.) Flot.	
<i>Cladonia cervicornis</i> (Ach.) Flot. ssp. <i>verticillata</i> (Hoffm.) Ahti	
<i>Cladonia chlorophaea</i> (Flörke ex Somm.) Spreng.	Álfabikar
<i>Cladonia furcata</i> (Huds.) Schrad.	Mókrókar
<i>Cladonia gracilis</i> (L.) Willd.	Þufubikar
<i>Cladonia macroceras</i> (Delise) Hav.	Kryppukrókar
<i>Cladonia macrophyllodes</i> Nyl.	
<i>Cladonia pocillum</i> (Ach.) Grognot	Torfubikar
<i>Cladonia pyxidata</i> (L.) Hoffm.	Grjónabikar
<i>Cladonia rangiferina</i> (L.) Web. ex Wigg. .	Grákrókar
<i>Cladonia rangiformis</i> Hoffm.	Strandkrókar
<i>Cladonia stricta</i> (Nyl.) Nyl.	Fjallabikar
<i>Cladonia subcervicornis</i> (Vain.) Kernst.	Skorulauf
<i>Cladonia symphyarpa</i> (Flörke) Fr.	
<i>Cladonia uncialis</i> (L.) Web. ex Wigg.	Gulkrókar
<i>Collema flaccidum</i> (Ach.) Ach.	Hreisturslembra
<i>Dermatocarpon intestiniforme</i> (Körb.) Hasse.	Parmakorpa

<i>Dibaeis baeomyces</i> (L. fil.) Rambold & Hertel	Hvítmæra
<i>Ephebe lanata</i> (L.) Vain.	
<i>Immersaria athroocarpa</i> (Ach.) Ramb. & Pietschmann.	
<i>Lecanora intricata</i> (Ach.) Ach.	Græntarga
<i>Lecanora polytropa</i> (Hoffm.) Rabenh.	Vaxtarga
<i>Lecanora rupicola</i> (L.) Zahlbr.	Blytarga
<i>Lecidea lapicida</i> (Ach.) var. <i>pantherina</i> Ach.	Grákarta
<i>Lecidea paupercula</i> Th.Fr.	
<i>Lepraria neglecta</i> (Nyl.) Lettau	Mosafrugga
<i>Leptogium lichenoides</i> (L.) Zahlbr.	Sliturtjása
<i>Megaspora verrucosa</i> (Ach.) Hafellner & Wirth	Hrímvarta
<i>Micarea assimilata</i> (Nyl.) Coppins	Mosasprekla
<i>Miriquidica garovaglii</i> (Schaer.) Hertel & Rambold	
<i>Ochrolechia frigida</i> (Sw.) Lynge	Broddskilma
<i>Parmelia omphalodes</i> (L.) Ach.	Litunarskóf
<i>Parmelia saxatilis</i> (L.) Ach.	Snepaskóf
<i>Peltigera aphthosa</i> (L.) Willd.	Flannaskóf
<i>Peltigera canina</i> (L.) Willd.	Engjaskóf
<i>Peltigera leucophlebia</i> (Nyl.) Gyeln.	Dílaskóf
<i>Peltigera malacea</i> (Ach.) Funck.	
<i>Peltigera membranacea</i> (Ach.) Nyl.	
<i>Peltigera polydactyla</i> (Neck.) Hoffm.	Glitskóf
<i>Peltigera rufescens</i> (Weis.) Humb.	Fjallaskóf
<i>Pertusaria corallina</i> (L.) Arn.	Kóralskán
<i>Pertusaria coriacea</i> (Th.Fr.) Th.Fr.	Sinuskán
<i>Pertusaria oculata</i> (Dicks.) Th.Fr.	Snepaskán
<i>Pertusaria xanthostoma</i> (Sommerf.) Fr.	Birkiskán
<i>Physcia caesia</i> (Hoffm.) Fűrnrrohr	Klappagráma
<i>Placopsis gelida</i> (L.) Linds.	Skeljaskóf
<i>Placynthium asperellum</i> (Ach.) Trevis	
<i>Polychidium muscicola</i> (Sw.) S.F.Gray	Mosakrekla
<i>Porpidia flavicunda</i> (Ach.) Gowan	Ryðkarta
<i>Porpidia melinodes</i> (Körb.) Gowan & Ahti	Fölvakarta
<i>Porpidia speirea</i> (Ach.) Krempelh.	Snækarta
<i>Protoparmelia badia</i> (Hoffm.) Hafelln	
<i>Pseudephebe minuscula</i> (Nyl. ex Arn.) Brodo & Hawksw	Voðarskóf
<i>Psoroma hypnorum</i> (Vahl) S.F.Gray	
<i>Rhizocarpon geographicum</i> (L.) DC.	Landfræðiflykra

<i>Solorina crocea</i> (L.) Ach.	Glóðargrýta
<i>Sphaerophorus globosus</i> (Huds.) Vain	Móakrækla
<i>Stereocaulon alpinum</i> Laur.	Grábreyskja
<i>Stereocaulon arcticum</i> Lynge.	Öræfabreyskja
<i>Stereocaulon rivulorum</i> Magn.	Melbreyskja
<i>Stereocaulon vesuvianum</i> Pers.	Hraunbreyskja
<i>Tephromela aglaea</i> (Sommerf.) Hertel & Rambold	
<i>Tephromela armeniaca</i> (DC.) Hertel & Rambold	
<i>Tephromela atra</i> (Huds.) Hafellner	
<i>Thamnozia vermicularis</i> (Sw.) Schaer.	Ormagrös
<i>Toninia squalescens</i> (Nyl.) Th.Fr.	
<i>Tremolecia atrata</i> (Ach.) Hertel	Dvergkarta
<i>Umbilicaria cylindrica</i> (L.) Delise	Skeggnafli
<i>Umbilicaria proboscidea</i> (L.) Schrad	Geitanafli
<i>Umbilicaria torrefacta</i> (Lightf.) Schrad	Sáldnafli
<i>Xanthoria elegans</i> (Link.) Th.Fr.	Klettaglæða

Moss heath. Species cover (%) / plot.

x = cover < 5%. - = cover unknown.

Transect 1.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Empetrum nigrum</i>	Krækilyng	x				x	30	50	20		20
<i>Vaccinium uliginosum</i>	Bláberjalyng	x	x	x			20	20	x		x
<i>Betula nana</i>	Fjalldrapi	x				x	x	30		x	
<i>Festuca vivipara</i>	Blávingull	x	x	x	x	x		x	x	x	x
<i>Luzula spicata</i>	Axhæra	x	x	x	x		x	x	x	x	
<i>Bistorta vivipara</i>	Kornsúra	x	x	x	x	x			x	x	
<i>Silene acaulis</i>	Lambagras	x	x		x	x		x	x	x	
<i>Dryas octopetala</i>	Holtasóley	x			x				x	x	x
<i>Equisetum variegatum</i>	Beitieski			x		x			x	x	x
<i>Agrostis vernalis</i>	Títulingresi	x		x						x	x
<i>Campanula rotundifolia</i>	Bláklukka		x	x	x						x
<i>Juncus trifidus</i>	Móasef	x		x	x			x			
<i>Pinguicula vulgaris</i>	Lyfjagras	x		x		x				x	
<i>Thymus praecox</i>	Blóðberg	x	x	x					x		
<i>Carex capillaris</i>	Hárleggjastör	x							x	x	
<i>Thalictrum alpinum</i>	Brjóstagras	x	x	x							
<i>Tofieldia pusilla</i>	Sýkigras			x					x	x	
<i>Bartsia alpina</i>	Smjörgras	x								x	
<i>Calluna vulgaris</i>	Beitilyng			x		x					
<i>Cassiope hypnoides</i>	Mosalyng		x		x						
<i>Cerastium alpinum</i>	Músareyra		x			x					
<i>Lychnis alpina</i>	Ljósberi	x		x							
<i>Plantago maritima</i>	Kattartunga					x	x				
<i>Potentilla crantzii</i>	Gullmura			x							x
<i>Salix herbacea</i>	Grasviðir	x		x							
<i>Saxifraga aizoides</i>	Gullsteinbrjótur	x			x						
<i>Saxifraga oppositifolia</i>	Vetrarblóm	x									x
<i>Alchemilla alpina</i>	Ljónslappi			x							
<i>Armeria maritima</i>	Geldingahnappur									x	
<i>Carex bigelowii</i>	Stinnastör					x					
<i>Cerastium fontanum</i>	Vegarfi		x								
<i>Epilobium spp.</i>	Dúnurt								x		
<i>Galium normanii</i>	Hvítmaðra				x						
<i>Luzula multiflora</i>	Vallhæra					x					
<i>Poa glauca</i>	Blásveifgras				x						
<i>Racomitrium lanuginosum</i>	Hraungambri	10	10	30	x	x	50	20	20	30	40
<i>Blindia acuta</i>	Almosi	-							-	-	
<i>Schistidium strictum</i>	Bollakragi	-	-							-	
<i>Andreaea rupestris</i>	Holtasóti	-	-								
<i>Tritomaria quinquedentata</i>	Skáhaki							-	-		
<i>Blepharostoma trichophyllum</i>	Hýmosi								-		
<i>Dicranum flexicaule</i>	Holtabrúskur								-		

Moss heath.

Transect 1.

Latin name	Icelandic name	Plots										
		1	2	3	4	5	6	7	8	9	10	
<i>Dicranum spadiceum</i>	Hagabrúskur								-			
<i>Fissidens adianthoides</i>	Mýfjöður								-			
<i>Ptilidium ciliare</i>	Móatrefja								-			
<i>Racomitrium canescens</i>	Hærugambri			-	-	-					-	
<i>Scapania degenii</i>	Vætuleppur								-			
<i>Sphagnum teres</i>	Bleytuburi								-			
<i>Warnstorfia sarmentosa</i>	Roðakló								-			
Other mosses than <i>R.lanuginos</i> .	Mosar aðrir en hraung.	10	x	x	x	x			x	10	10	x
<i>Cladonia arbuscula</i>	Hreindýrakraókar					10	10					
<i>Cetraria islandica</i>	Fjallagrös					x	10					
<i>Stereocaulon spp.</i>	Breyskja			x						x		
<i>Cladonia furcata</i>	Mókrókar										x	
<i>Ochrolecia frigida</i>	Broddskilma										x	
<i>Cetraria aculeata/muricata</i>	Melakræða		x									
<i>Cladonia gracilis</i>	Þufubíkar						x	x			x	
<i>Sphaerophorus globosus</i>	Móakræða						x					
<i>Cladonia uncialis</i>	Gulkrókar						x					
<i>Peltigera membranacea</i>									x			
<i>Peltigera malacea</i>									x			
<i>Umbilicaria proboscydea</i>	Geitanafli				x							
<i>Umbilicaria cylindrica</i>	Skeggnafli		x		x						x	
Crustose lichens on rocks	Hrúðurfléttur á stein	10	40	10	40	30						
Rocks and bare ground	Grjót og ógróið	60	80	60	90	90	10		60			

Moss heath

Transect 3.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Empetrum nigrum</i>	Krækilyng	20	10	x		20	20	10	10	x	x
<i>Festuca vivipara</i>	Blávingull	x	x	x		x	x	x	x	x	x
<i>Thymus praecox</i>	Blóðberg	x	x	x	x	x		x	x	x	x
<i>Bistorta vivipara</i>	Kornsúra	x		x	x	x	x	x			x
<i>Campanula rotundifolia</i>	Bláklukka	x	x	x		x	x	x	x		
<i>Juncus trifidus</i>	Móasef	x	x	x	x	x		x	x	x	x
<i>Agrostis</i> spp.	Língresi	x	x	x			x	x			x
<i>Equisetum variegatum</i>	Beitieski	x	x				x	x		x	x
<i>Thalictrum alpinum</i>	Brjóstagras	x	x	x			x			x	x
<i>Galium normanii</i>	Hvítmaðra	x				x	x			x	x
<i>Silene acaulis</i>	Lambagras		x	x			x		x		x
<i>Alchemilla alpina</i>	Ljónslappi		x	x	x	x					
<i>Luzula</i> spp.	Hæra					x	x			x	x
<i>Agrostis vienalis</i>	Títulíngresi					x			x	x	
<i>Betula nana</i>	Fjalldrapi				x	x					x
<i>Cerastium alpinum</i>	Músareyra							x		x	x
<i>Vaccinium uliginosum</i>	Bláberjalyng								x	x	x
<i>Carex bigelowii</i>	Stinnastör						x				x
<i>Dryas octopetala</i>	Holtasóley					x		x			
<i>Luzula spicata</i>	Axhæra			x	x						
<i>Poa glauca</i>	Blásveifgras									x	x
<i>Saxifraga oppositifolia</i>	Vetrarblóm					x					x
<i>Calluna vulgaris</i>	Beitilyng										x
<i>Cassiope hypnoides</i>	Mosalyng		x								
<i>Equisetum arvense</i>	Klóelfting	x									
<i>Potentilla crantzii</i>	Gullmura										x
<i>Salix herbacea</i>	Grasvíðir		x								
<i>Taraxacum</i> spp.	Túnfífill	x									
<i>Tofieldia pusilla</i>	Sýkigras							x			
<i>Racomitrium lanuginosum</i>	Hraungambri	80	30	10	30	40	80	20	20	30	40
<i>Hylocomium splendens</i>	Tildurmosi				x	x		x			
<i>Andreaea rupestris</i>	Holtasóti			x	x						
<i>Thamnolia vermicularis</i>	Ormagrös	x	x		x	x		x			x
<i>Cetraria aculeata</i>	Melakræða				x	x		x		x	x
<i>Pertusaria</i> sp.	Tegund af skán		x	x		x			x		x
<i>Cladonia uncialis</i>	Gulkrókar	x			x		x				x
<i>Stereocaulon arcticum</i>	Grábreykskja							x	x		
<i>Stereocaulon</i> spp.	Breykskja			x		x					x
<i>Cetraria islandica</i>	Fjallagrös	x			x					x	
<i>Stereocaulon alpinum</i>	Grábreykskja				x		x	x			
<i>Baeomyces rufus</i>	Torfmaera							x	x		

Transect 3.

Latin name	Icelandic name	Plots										
		1	2	3	4	5	6	7	8	9	10	
<i>Cladonia arbuscula</i>	Hreindýrakraókar						x				x	
<i>Alectoria nigricans.</i>	Surtarkræða		x									
<i>Cladonia stricta</i>	Fjallabíkar						x					
<i>Dibaeae baeomyces</i>	Hvítmæra								x			
<i>Pertusaria xanthostoma</i>	Birkiskán		x									
<i>Stereocaulon rivulorum</i>	Melbreyskja				x							
Crustose lichens on rocks	Hrúðurfléttur á grjóti		10	x	10	10			x		10	
Rocks and bare ground	Grjót og ógróið	10	40	80	50	20	60	60	50	50	40	

Moss heath land

Transect 10.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Lychnis alpina</i>	Ljósberi					x					
<i>Rhinanthus minor</i>	Lokasjóður									x	
<i>Saxifraga caespitosa</i>	Þúfusteinbrjótur									x	
<i>Racomitrium lanuginosum</i>	Hraungambri	100	80	80	90	50	10	80	50	30	100
<i>Prilidium ciliare</i>	Móatrefja				-						
<i>Aulacomnium turgidum</i>	Bústinkollur			-							
<i>Blindia acuta</i>	Almosi						-	-	-		
<i>Racomitrium ericoides</i>	Melagambri			-							
<i>Hylocomium splendens</i>	Tildurmosi			-				-		-	
<i>Dicranum spadicum</i>	Hagabrúskur			-	-						
<i>Tomenthypnum nitens</i>	Lémosi				-						
<i>Campylium stellatum</i>	Mýrabrandur						-				
<i>Barbilophozia quadriloba</i>	Vætularfi							-			
<i>Scorpidium cossonii</i>	Lindakrækja						-	-	-		
Mosses other than <i>R. lanuginos.</i>	Aðrir mosar en hraung.			x	x		x	10	10	10	
<i>Cetraria aculeata/muricata</i>	Melakræða	x	x	x	x	x					x
<i>Cetraria islandica</i>	Fjallagrös	x	x	x	x	x			x		
<i>Cladonia arbuscula</i>	Hreindýrakraókar	x	x	x	x	x					x
<i>Cladonia furcata</i>	Mókrókar	x	x	x	x	x					
<i>Cladonia uncialis</i>	Gulkrókar	x	x	x							x
<i>Stereocaulon</i> spp.			x							x	
<i>Cladonia borealis</i>	Skarlatsbikar										x
<i>Cladonia gracilis</i>	Þúfubikar			x							
<i>Cladonia</i> spp.		x									
<i>Cladonia</i> spp.			x								
<i>Crustose lichen</i>					x						
<i>Ochrilechia frigida</i>	Broddskilma		x								
<i>Peltigera leucophlebia</i>	Dílaskóf			x							
<i>Pertusaria</i> spp.						x					
<i>Stereocaulon alpinum</i>	Grábreyskja										x
Stones and bare ground	Steinar og ógróið					50	70	60			

Moss heath land

Transect 10.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Empetrum nigrum</i>	Krækilyng	x	30	20	10	10	x	x			x
<i>Betula nana</i>	Fjalldrapi				10	x	x				
<i>Vaccinium uliginosum</i>	Bláberjalyng	x	x	10	x	x	x	x	x		
<i>Bistorta vivipara</i>	Kornsúra	x	x	x	x	x	x	x	x	x	x
<i>Equisetum variegatum</i>	Beitieski	x	x	x	x	x	x	x	x	x	x
<i>Thalictrum alpinum</i>	Brjóstagras	x	x	x	x	x	x	x	x	x	
<i>Agrostis vernalis</i>	Títulíngresi		x	x	x	x		x	x	x	
<i>Juncus trifidus</i>	Móasef	x	x	x		x	x	x			x
<i>Campanula rotundifolia</i>	Bláklukka	x		x	x	x			x		x
<i>Equisetum pratense</i>	Vallefting		x	x	x	x	x			x	
<i>Salix herbacea</i>	Grasvíðir		x	x			x	x	x	x	
<i>Silene acaulis</i>	Lambgras			x			x	x	x	x	x
<i>Luzula</i> spp.	Hæra	x			x	x			x	x	x
<i>Carex bigelowii</i>	Stinnastör	x	x	x			x	x			
<i>Carex capillaris</i>	Hárleggjastör			x		x	x	x	x		
<i>Plantago maritima</i>	Kattartunga	x		x		x		x		x	
<i>Thymus praecox</i>	Blóðberg		x	x		x	x			x	
<i>Tofieldia pusilla</i>	Sýkigras	x	x		x				x		x
<i>Festuca vivipara</i>	Blávingull	x		x	x	x					
<i>Galium normanii</i>	Hvítmaðra			x	x					x	x
<i>Pinguicula vulgaris</i>	Lyfjagras		x				x	x			x
<i>Poa glauca</i>	Blásveifgras	x		x	x				x		
<i>Potentilla crantzii</i>	Gullmura	x	x		x				x		
<i>Saxifraga aizoides</i>	Gullsteinbrjótur					x	x	x	x		
<i>Selaginella selaginoides</i>	Mosajafni	x	x			x	x				
<i>Armeria maritima</i>	Geldingahnappur						x	x	x		
<i>Dryas octopetala</i>	Holtasóley					x	x			x	
<i>Rumex acetosa</i>	Túnsúra		x	x					x		
<i>Alchemilla alpina</i>	Ljónslappi			x		x					
<i>Cassiope hypnoides</i>	Mosalýng					x	x				
<i>Cerastium alpinum</i>	Músareyra			x		x					
<i>Deschampsia caespitosa</i>	Snarrótarpuntur	x		x							
<i>Festuca rubra</i>	Túnvingull						x				x
<i>Juncus triglumis</i>	Blómsef						x		x		
<i>Sedum villosum</i>	Flagahnoðri						x			x	
<i>Agrostis</i> spp.	Língresi	x									
<i>Agrostis stolonifera</i>	Skriðlíngresi							x			
<i>Arenaria norvegica</i>	Skeggsandi						x				
<i>Cardamine nymanii</i>	Hrafnaklukka				x						
<i>Carex maritima</i>	Bjúgstör							x			
<i>Equisetum arvense</i>	Klóelfting	x									
<i>Hieracium</i> spp	Undaffill				x						
<i>Juncus biglumis</i>	Flagasef								x		
<i>Luzula spicata</i>	Axhæra			x							

Moss heath.

Transect 9.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Trisetum spicatum</i>	Lógresi	x									
<i>Racomitrium lanuginosum</i>	Hraungambri	70		60	x		50	40	40	50	70
<i>Barbilophozia kunzeana</i>	Mýralarfi			-							
<i>Barbilophozia quadriloba</i>	Vætularfi			-							
<i>Blepharostoma trichophyllum</i>	Hýmosi			-							
<i>Campylium stellatum</i>	Mýrabrandur	-	-	-							
<i>Dicranum flexicaule</i>	Holtabrúskur	-	-								
<i>Dicranum scoparium</i>	Móabrúskur			-							
<i>Fissidens adianthoides</i>	Mýrfjöldur	-	-								
<i>Fissidens osmundoides</i>	Vætufjöldur	-	-	-							
<i>Hylocomium splendens</i>	Tildurmosi		-	-	-						-
<i>Myurella julacea</i>	Syllureim	-	-								
<i>Oncophorus virens</i>	Eyrahmúði	-	-								
<i>Pleurozium schreberi</i>	Hrismosi			-	-						-
<i>Ptilidium ciliare</i>	Móatrefja		-	-	-						-
<i>Racomitrium ericoides</i>	Melagambri			-	-						-
<i>Rhizomnium magnifolium</i>	Lindafaldur			-							
<i>Rhytidium rugosum</i>	Rjúpumosi		-	-	-						-
<i>Sanionia uncinata</i>	Móasigð			-	-						-
<i>Scapania degenii</i>	Vætuleppur										
<i>Scorpidium cossonii</i>	Lindakrækja	-	-								
<i>Scorpidium revolvens</i>	Mýrakrækja			-							
<i>Sphagnum teres</i>	Bleytuburi			-							
<i>Sphagnum warnstorffii</i>	Rauðburi										
<i>Tomenthypnum nitens</i>	Lémosi		-	-	-						-
<i>Tritomaria quinquedentata</i>	Skáhaki		-	-		-					-
<i>Polytrichastrum alpinum</i>	Fjallalubbi		-	-							
Other mosses than <i>R. lanuginos.</i>	Aðrir mosar en hraung.	x	30	x	30	20					20
<i>Cladonia arbuscula</i>	Hreindýrakrókar	x		x			x	x	x		
<i>Cetraria islandica</i>	Fjallagrös							x	x	x	x
<i>Cladonia spp.</i>		x							x	x	
<i>Cetraria aucleata/muricata</i>	Melakræða	x					x	x	x	x	
<i>Stereocaulon spp.</i>											x
<i>Chromatochlamys muscorum</i>								x			
Bare ground	Ógróið			20			30	50	20		

Moss heath.

Transect 12.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Racomitrium lanuginosum</i>	Hraungambri	50	70	x	80	70	20	90	80	70	70
<i>Hylocomium splendens</i>	Tildurmosi		x								x
<i>Rhytidiadelphus squarrosus</i>	Engjaskraut		x								x
<i>Ptilidium ciliare</i>	Móatrefja					x					x
<i>Dicranum flexicaule</i>	Holtabrúskur					x					10
<i>Cladonia furcata</i>	Mókrókar				x	10	x		x	x	x
<i>Cladonia uncialis</i>	Gulkrókar			x	x	10	x	x		x	x
<i>Cladonia rangiferina</i>	Grákrókar		10			x					x
<i>Parmelia saxatilis</i>	Sneparskóf	x		x	x	x		x	x		
<i>Sphaerophorus globosus</i>	Móakrækla	x		x	x	x			x	x	
<i>Cladonia arbuscula</i>	Hreindýrakrókar			x	x	x		x	x		x
<i>Cladonia spp.</i>		x	x				x		x		x
<i>Stereocaulon alpinum</i>	Grábreyskja	x		x				x	x	x	
<i>Cetraria aculeata/muricata</i>	Melakræða			x				x	x	x	
<i>Cetraria islandica</i>	Fjallagrös	x	x	x							x
<i>Thamnolia vermicularis</i>	Ormagrös			x	x	x		x		x	
<i>Cladonia rangiformis</i>	Strandkrókar	x								x	x
<i>Ochrolechia spp</i>		x			x					x	
<i>Stereocaulon spp.</i>					x	x					
<i>Brigantia fuscolutea</i>								x			
<i>Cladonia gracilis</i>	Þúfubikar										x
<i>Pseudephebe minuscula</i>	Voðarskóf			x							
<i>Umbilicaria torrefacta</i>	Sáldnafli				x						
<i>Cladonia borealis</i>	Skarlatsbikar			x						x	
<i>Cladonia macroceras.</i>	Kryppukrókar					x					
Bare ground	Ógróið	10	10	20						20	

Dwarf shrub vegetation. Species cover

(%) / plot. x = < 5%. - = the species was found, cover unknown.

Transect 2.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Empetrum nigrum</i>	Krækilyng	50	30	20	20	20	60	30	20	x	30
<i>Vaccinium uliginosum</i>	Bláberjalyng	20	30	20	30	50	20	x	20	70	20
<i>Betula nana</i>	Fjalldrapi	20	20	x	10		x	x	30	10	10
<i>Calluna vulgaris</i>	Beitilyng		x	50	30	x					
<i>Bistorta vivipara</i>	Kornsúra	x	x	x	x	x	x	x	x	x	x
<i>Festuca vivipara</i>	Blávingull	x	x	x	x	x	x	x	x	x	x
<i>Campanula rotundifolia</i>	Bláklukka	x					x	x	x	x	x
<i>Deschampsia flexuosa</i>	Bugðupunktur		x		x	x			x	x	x
<i>Luzula multiflora</i>	Vallhæra	x	x		x			x	x		
<i>Plantago maritima</i>	Kattartunga	x		x			x	x	x		
<i>Dryas octopetala</i>	Holtasóley				x	x	x	x			
<i>Festuca rubra</i>	Túnvingull						x	x	x	x	
<i>Thalictrum alpinum</i>	Brjóstagrass	x							x	x	x
<i>Agrostis</i> spp.	Língresi	x		x	x						
<i>Agrostis vernalis</i>	Títulíngresi					x	x			x	
<i>Alchemilla alpina</i>	Ljónslappi	x	x				x				
<i>Carex bigelowii</i>	Stinnastör	x		x	x						
<i>Equisetum variegatum</i>	Beitieski	x						x			x
<i>Anthoxanthum odoratum</i>	Ílmreyr			x	x						
<i>Carex vaginata</i>	Slíðrastör									x	x
<i>Deschampsia caespitosa</i>	Snarrótarpunktur									x	x
<i>Galium normanii</i>	Hvítmaðra									x	x
<i>Galium verum</i>	Gulmaðra									x	x
<i>Juncus trifidus</i>	Móasef							x	x		
<i>Thymus praecox</i>	Blóðberg						x				x
<i>Hieracium</i> spp.	Undafífill									x	
<i>Hierochloe odorata</i>	Reyrgresi										x
<i>Kobresia myosuroides</i>	Þursaskegg										x
<i>Luzula</i> spp.	Hæra						x				
<i>Potentilla crantzii</i>	Gullmura						x				
<i>Rubus saxatilis</i>	Hrútaber					x					
<i>Salix callicarpaea</i>	Grávíðir									x	
<i>Taraxacum</i> spp.	Túnfífill				x						
<i>Hylocomium splendens</i>	Tildurmosi	-	-	-	-	-	-	-	-	-	-
<i>Pleurozium schreberi</i>	Hrísmosi	-	-	-	-	-	-	-	-	-	-
<i>Rhytidiadelphus squarrosus</i>	Engjaskraut	-	-	-	-	-	-	-	-	-	-
<i>Racomitrium lanuginosum</i>	Hraungambri	-	-						-	-	
Mosses total	Mosar	40	50	20	20	50	10	20	30	50	x
<i>Cetraria islandica</i>	Fjallagrös			x	x	x	x	x			
<i>Peltigera canina</i>	Engjaskóf	x			x						
<i>Cetraria aculeata</i>	Melakraða						x	x			
<i>Peltigera aphosa</i>	Flannaskóf						x				
<i>Peltigera rufescens</i>	Fjallaskóf						x				

Transect 4.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Vaccinium uliginosum</i>	Bláberjalyng	40	40	40	10	80	x	x	40	40	60
<i>Empetrum nigrum</i>	Krækilyng	x	40	60	20	x			50	10	
<i>Deschampsia flexuosa</i>	Bugðupuntur	30	x		x	10	20	20	x	x	x
<i>Salix callicarpea</i>	Gráviðir				x	x	x	40			
<i>Vaccinium myrtillus</i>	Aðalbláberjalyng								10	20	40
<i>Kobresia myosuroides</i>	Þursaskegg			x			20	x			
<i>Arctostaphylos uva-ursi</i>	Sortulyng						10				
<i>Galium normanii</i>	Hvítmaðra	x	x	x		x	x	x	x	x	x
<i>Luzula multiflora</i>	Vallhæra	x		x	x	x		x		x	
<i>Taraxacum</i> spp.	Túnfífill		x			x		x	x	x	x
<i>Agrostis capillaris</i>	Hálingresi						x	x	x	x	x
<i>Alchemilla alpina</i>	Ljónslappi				x		x	x		x	x
<i>Anthoxanthum odoratum</i>	Ilmreyr	x		x		x	x	x			
<i>Thalictrum alpinum</i>	Brjóstagras		x	x		x		x		x	
<i>Campanula rotundifolia</i>	Bláklukka		x	x	x		x				
<i>Geranium sylvaticum</i>	Blágresi		x						x	x	x
<i>Agrostis vernalis</i>	Títulingresi		x				x	x			x
<i>Carex bigelowii</i>	Stinnastör	x	x	x							
<i>Deschampsia caespitosa</i>	Snarrótarpuntur	x			x					x	
<i>Equisetum arvense</i>	Klóelfting				x				x	x	
<i>Festuca vivipara</i>	Blávingull	x	x				x				
<i>Galium verum</i>	Gulmaðra						x	x			x
<i>Ranunculus acris</i>	Brennisóley							x		x	x
<i>Bistorta vivipara</i>	Kornsúra	x		x							
<i>Calluna vulgaris</i>	Beitilyng				x	x					
<i>Dryas octopetala</i>	Holtasóley			x	x						
<i>Festuca rubra</i>	Túnvingull							x	x		
<i>Hieracium</i> spp.	Undafífill				x			x			
<i>Thymus praecox</i>	Blóðberg						x	x			
<i>Festuca</i> spp.	Vingull			x	x						
<i>Achillea millefolium</i>	Vallhumall							x			
<i>Agrostis</i> spp.	Língresi					x					
<i>Alchemilla vulgaris</i>	Mariustakkur							x			
<i>Betula pubescens</i>	Birki										x
<i>Carex</i> spp.	Stör							x			
<i>Dactylorhiza maculata</i>	Brönugrös										x
<i>Equisetum pratense</i>	Vallelfting						x				
<i>Equisetum variegatum</i>	Beitieski								x		
<i>Hierochloe odorata</i>	Reyrgresi							x			
<i>Luzula</i> spp.	Hæra							x			
<i>Rubus saxatilis</i>	Hrútaber								x		
<i>Veronica officinalis</i>	Hárdepla										x
<i>Hylocomium splendens</i>	Tildurmosi	20	x	20	60	50	30	10	x	x	x

Grassland. Species cover (%) / plot.

x = < 5%. - = cover unknown.

Transect 5.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Deschampsia flexuosa</i>	Bugðupuntur	60	x	30	x	x	20	20	40		x
<i>Agrostis capillaris</i>	Hálingresi	x	x				x		x	20	40
<i>Empetrum nigrum</i>	Krækilyng			x	20	20		20			
<i>Nardus stricta</i>	Finnungur		20	10	x	10			x	x	x
<i>Achillea millefolium</i>	Vallhumall		10								
<i>Alchemilla faeroensis</i>	Mariuvöttur		x	x	10	x				x	
<i>Betula nana</i>	Fjalldrapi		x	10	x						
<i>Calluna vulgaris</i>	Beitilyng			10							
<i>Festuca vivipara</i>	Blávingull	10	x	x	x		x	x	x		
<i>Thymus praecox</i>	Blóðberg	x	x	x	x	10	x	x	x		
<i>Campanula rotundifolia</i>	Bláklukka	x	x	x	x	x	x	x	x	x	x
<i>Carex vaginata</i>	Slíðrastör	x	x	x	x	x	x	x	x	x	x
<i>Equisetum arvense</i>	Klóelfting	x	x	x	x		x	x	x	x	x
<i>Equisetum variegatum</i>	Beitieski		x	x	x	x	x	x	x	x	x
<i>Galium normanii</i>	Hvítmaðra	x	x	x	x	x	x		x	x	
<i>Agrostis</i> spp.	Língresi	x	x	x	x	x	x	x			
<i>Anthoxanthum odoratum</i>	Ílmreyr			x	x	x	x		x	x	x
<i>Galium verum</i>	Gulmaðra	x	x	x				x	x	x	x
<i>Kobresia myosuroides</i>	Þursaskegg	x		x	x	x	x	x			
<i>Luzula multiflora</i>	Vallhæra				x	x			x		x
<i>Deschampsia caespitosa</i>	Snarrótarpuntur	x					x		x	x	
<i>Equisetum pratense</i>	Vallelfting		x	x					x		
<i>Festuca rubra</i>	Túnvingull		x	x		x					
<i>Juncus trifidus</i>	Móasef				x		x	x			
<i>Agrostis vienalis</i>	Títulíngresi	x							x		
<i>Alchemilla alpina</i>	Ljónslappi				x						x
<i>Cerastium fontanum</i>	Vegarfi						x			x	
<i>Selaginella selaginoides</i>	Mosajafni		x							x	
<i>Botrychium lunaria</i>	Tungljurt		x								
<i>Hierochloe odorata</i>	Reyrgresi									x	
<i>Potentilla crantzii</i>	Gullmura		x								
<i>Viola canina</i>	Týsfjola		x								
<i>Hylocomium splendens</i>	Tildurmosi	10	x	x	x	x	50	40	30	20	
<i>Andreaea rupestris</i>	Holtasóti							x			
<i>Dicranoweisia crispula</i>	Kármosi							x			
<i>Cladonia arbuscula</i>	Hreindýrkrókar			x		10	x	x			
<i>Cetraria islandica</i>	Fjallagrös					x					
<i>Cladonia furcata</i>	Mókrókar					x					
<i>Cladonia gracilis</i>	Þufubíkar					x					
<i>Cladonia rangiferina</i>	Grákrókar				x						
<i>Peltigera leucophlebia</i>	Dílaskóf					x					
<i>Rhizocarpon</i> sp.								x			
<i>Umbilicaria cylindrica</i>	Skeggnafli							x			
<i>Lepraria</i> sp.								x			
Stone	Steinar							20			

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Alchemilla vulgaris</i>	Mariustakkur		30	20	x		20	x		x	30
<i>Deschampsia caespitosa</i>	Snarrótarpunktur	30	x	10	20	x	x	x	x	x	x
<i>Salix callicarpaea</i>	Gráviðir					x	20	x			40
<i>Hierochloe odorata</i>	Reyrgresi	20		x		x					
<i>Plantago maritima</i>	Kattartunga					x	x		x	10	x
<i>Agrostis capillaris</i>	Hálingresi	x	x	x	x	x	x	x	x	x	x
<i>Bistorta vivipara</i>	Kornsúra	x	x	x	x	x	x	x	x	x	x
<i>Campanula rotundifolia</i>	Bláklukka	x	x	x	x	x	x	x	x	x	x
<i>Festuca rubra</i>	Túnvingull	x	x	x	x	x	x	x		x	x
<i>Festuca vivipara</i>	Blávingull	x	x		x	x	x	x	x	x	x
<i>Galium verum</i>	Gulmaðra	x	x	x	x	x		x	x	x	x
<i>Equisetum variegatum</i>	Beitieski		x	x	x	x			x	x	
<i>Achillea millefolium</i>	Vallhumall	x	x		x	x	x	x	x	x	
<i>Agrostis vernalis</i>	Títulingresi			x		x	x	x	x	x	x
<i>Anthoxanthum odoratum</i>	Ilmreyr	x	x	x		x	x		x	x	
<i>Carex vaginata</i>	Slíðrastör				x	x	x	x	x	x	x
<i>Galium normanii</i>	Hvítmaðra		x	x	x	x	x		x	x	x
<i>Juncus trifidus</i>	Móasef		x			x	x	x	x	x	x
<i>Leontodon autumnalis</i>	Skarífífill	x	x	x	x	x				x	x
<i>Equisetum arvense</i>	Klóelfting		x				x	x	x	x	x
<i>Luzula multiflora</i>	Vallhæra		x		x	x		x	x	x	
<i>Potentilla cratzii</i>	Gullmura		x			x	x	x	x	x	
<i>Ranunculus acris</i>	Brennisóley		x			x	x		x	x	
<i>Rhinanthus minor</i>	Lokasjóður			x	x	x	x		x		x
<i>Carex bigelowii</i>	Stinnastör		x			x	x		x	x	
<i>Kobresia myosuroides</i>	Þursaskegg		x		—	x	x		x	x	
<i>Selaginella selaginoides</i>	Mosajafni				x	x	x		x		x
<i>Taraxacum spp.</i>	Túnfífill	x	x	x	x						x
<i>Thalictrum alpinum</i>	Brjóstagras						x	x	x	x	x
<i>Thymus praecox</i>	Blóðberg		x		x	x		x		x	
<i>Carex capillaris</i>	Hárleggjastör						x	x	x	x	
<i>Hieracium spp</i>	Undafífill		x		x				x	x	
<i>Vaccinium uliginosum</i>	Bláberjalyng					x	x		x		x
<i>Carex panicea</i>	Belgjastör							x	x		x
<i>Silene acaulis</i>	Lambagras						x			x	x
<i>Alchemilla alpina</i>	Ljónslappi					x				x	
<i>Equisetum pratense</i>	Vallelfting	x									x
<i>Poa pratensis</i>	Vallarsveifgras	x			x						
<i>Salix herbacea</i>	Grasviðir						x		x		
<i>Viola canina</i>	Týsfjóla		x								x
<i>Bartsia alpina</i>	Smjörgras						x				
<i>Botrychium lunaria</i>	Tungljurt		x								
<i>Carex capitata</i>	Hnappstör								x		

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Cerastium fontanum</i>	Vegarfi					x					
<i>Empetrum nigrum</i>	Krækilyng				x						x
<i>Phleum alpinum</i>	Fjallafoxgras			x							
<i>Phleum pratense</i>	Vallarfoxgras			x							
<i>Rumex acetosa</i>	Túnsúra	x									
<i>Trichophorum caespitosum</i>	Mýrafinnungur								x		
<i>Hylocomium splendens</i>	Tildurmosi	-	-	-	-	-	-	-	-	-	-
<i>Rhytidadelphus squarrosus</i>	Engjaskraut	-	-	-	-	-	-	-	-	-	-
<i>Bryum pseudotriquetrum</i>	Kelduhnokki							-			
<i>Ctenidium molluscum</i>	Urðaglæsa							-			
<i>Fissidens adianthoides</i>	Mýrfjöður							-	-		
<i>Brachythecium albicans</i>	Götulokkur	-									
<i>Plagiomnium elatum</i>	Deiglubleðill							-		-	-
<i>Sanionia uncinata</i>	Móasigð							-		-	-
<i>Scapania degenii</i>	Vætuleppur							-		-	-
<i>Schistidium papillosum</i>	Vörtukrgi							-		-	-
<i>Tomentypnum nitens</i>	Lémosi			-				-		-	-
<i>Andreaea rupestris</i>	Holtasóti							-		-	-
Total cover of mosses	Þekja mosa	50	40	10	20	90	90	40	90	70	20
<i>Cadonia pocillum</i>									x		
<i>Cladonia rangiferina</i>	Grákrókar							x			
<i>Cladonia borealis</i>	Skarlatsbikar									x	
<i>Peltigera rufescens</i>	Fjallaskóf							x	x		
<i>Peltigera polydactylon</i>									x		
Bare ground, stone	Ógróið og grjót							50			

Wetland.

Transect 6.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Meesia triquetra</i>	Keldusnoppa			-	-	-	-			-	
<i>Meesia uliginosa</i>	Vætusnoppa			-	-	-	-			-	-
<i>Odontoschisma macounii</i>	Heiðagepill										-
<i>Oncophorus virens</i>	Eyrahnúði				-	-	-			-	-
<i>Philonotis fontana</i>	Dýjahnappur				-	-	-			-	-
<i>Racomitrium ericoides</i>	Melagambri			-			-				
<i>Racomitrium lanuginosum</i>	Hraungambri		-							-	
<i>Riccardia chamedryfolia</i>	Pollabendill				-	-	-			-	
<i>Sanionia uncinata</i>	Móasigð	-	-				-	-	-		
<i>Scapania irrigua</i>	Mýraleppur	-	-		-	-	-	-	-	-	-
<i>Scapania undulata</i>	Lækjaleppur	-						-			
<i>Scorpidium cossonii</i>	Lindakrækja						-				
<i>Scorpidium revolvens</i>	Mýrakrækja		-	-	-	-	-		-	-	-
<i>Sphagnum teres</i>	Bleytuburi	-	-				-	-			
<i>Sphagnum warnstorffii</i>	Rauðburi	-	-					-			
<i>Straminergon stramineum</i>	Seilmosi	-						-			
<i>Tomenthypnum nitens</i>	Lémosi	-	-					-	-		
<i>Tritomaria quinquedentata</i>	Skáhaki				-	-	-			-	-
<i>Warnstorffia sarmentosa</i>	Roðakló		-	-	-	-	-		-	-	
Cover of mosses	Þekja mosa	30	x	60	20	50	x	30	x	30	10

Wetland. Species cover (%) / plot.

x = < 5%.

- = cover unknown.

Transect 6.

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Betula nana</i>	Fjalldrapi	10	x	x	40	10	x	10	10		10
<i>Carex nigra</i>	Mýrastör	10	10	10	10	10	20	x	x	x	10
<i>Vaccinium uliginosum</i>	Bláberjalyng	10	x		10	10	x	10	x	10	20
<i>Empetrum nigrum</i>	Krækilyng	10	x	x	x	x	x	40	x	x	10
<i>Carex rariflora</i>	Hengistör			x	x		x			10	x
<i>Salix callicarpaea</i>	Gráviðir	x			x	x		10		x	
<i>Carex rostrata</i>	Tjarnastör	x			x	x	x	x	10	x	x
<i>Bistorta vivipara</i>	Kornsúra	x	x	x	x	x	x	x		x	x
<i>Eriophorum angustifolium</i>	Klófifa	x	x			x		x	x	x	x
<i>Thalictrum alpinum</i>	Brjóstagras	x	x		x	x					x
<i>Equisetum arvense</i>	Klóelfting	x	x						x	x	
<i>Trichophorum caespitosum</i>	Mýranál	x		x			x		x		
<i>Agrostis vernalis</i>	Títulíngresi		x				x				
<i>Equisetum variegatum</i>	Beitieski	x		x							
<i>Eriophorum scheuchzeri</i>	Hrafnafifa			x						x	
<i>Juncus trifidus</i>	Móasef		x	x							
<i>Pinguicula vulgaris</i>	Lyfjagras		x	x							
<i>Selaginella selaginoides</i>	Mosajafni		x								
<i>Bartsia alpina</i>	Smjörgras			x							
<i>Campanula rotundifolia</i>	Bláklukka							x			
<i>Carex capillaris</i>	Hárleggjastör		x								
<i>Carex dioica</i>	Tvíbýlisstör			x							-
<i>Festuca</i> spp.	Vingull						x				
<i>Festuca vivipara</i>	Blávingull		x								
Cover of mosses	Þekja mosa	30	x	60	20	50	x	30	x	30	10
<i>Barbilophozia kunzeana</i>	Mýralarfi	-	-					-			-
<i>Bryum pseudotriquetrum</i>	Kelduhnokki		-	-	-	-	-			-	-
<i>Calliergon giganteum</i>	Tjarnahrókur			-	-	-	-			-	-
<i>Campylium stellatum</i>	Mýrabrandur		-	-	-	-	-		-	-	-
<i>Cephalozia bicuspidata</i>	Vætukrýli		-	-							
<i>Cephaloziella hampeana</i>	Vætuvaeskill	-	-				-	-			-
<i>Ceratodon purpureus</i>	Hlaðmosi						-				
<i>Cinclidium stygium</i>	Keldudepill		-	-	-	-	-		-	-	
<i>Climacium dendroides</i>	Krónumosi		-								
<i>Dichodontium pellucidum</i>	Glætumosi				-	-	-				-
<i>Dicranum bonjeanii</i>	Mýrabrúskur										-
<i>Fissidens adianthoides</i>	Mýrfjöldur		-	-	-	-	-		-	-	
<i>Lophozia bantriensis</i>	Mýralápur				-	-	-			-	-
<i>Lophozia rutheana</i>	Keldulápur				-	-				-	-

Wetland.

Transect 8.

* = cover of *R. squarrosus* + *H. splendens*

Latin name	Icelandic name	Plots									
		1	2	3	4	5	6	7	8	9	10
<i>Vaccinium uliginosum</i>	Bláberjalyng	x				x	30	20			x
<i>Equisetum variegatum</i>	Beitieski	x	x	20		10	x	x	x	10	x
<i>Salix lanata</i>	Loðvíðir					30	10				
<i>Equisetum palustre</i>	Mýrelfting	x	x	10		x	x	x	x	20	x
<i>Salix phylicifolia</i>	Gulvíðir								30	x	
<i>Salix callicarpaea</i>	Grávíðir	x		x		x		20		x	
<i>Carex nigra</i>	Mýrastör	x	x	x	x	x	x	x	x	x	x
<i>Bistorta vivipara</i>	Kornsúra	x	x		x	x	x	x	x	x	x
<i>Thalictrum alpinum</i>	Brjóstagras		x	x	x		x	x	x		x
<i>Festuca rubra</i>	Túnvingull				x			x	x	x	x
<i>Luzula multiflora</i>	Vallhæra	x			x		x	x	x		
<i>Eriophorum angustifolium</i>	Klófifa	x					x		x	x	
<i>Festuca vivipara</i>	Blávingull		x		x				x		x
<i>Juncus arcticus</i>	Hrossanál		x				x		x		x
<i>Equisetum pratense</i>	Vallefting			x		x				x	
<i>Galium normanii</i>	Hvítmaðra		x	x							
<i>Galium verum</i>	Gulmaðra		x		x						
<i>Hierochloe odorata</i>	Reyrgresi		x	x					x		
<i>Poa pratensis</i>	Vallarsveifgras				x						x
<i>Salix herbacea</i>	Grasvíðir			x		x					
<i>Achillea millefolium</i>	Vallhumall								x		
<i>Betula nana</i>	Fjalldrapi	x									
<i>Campanula rotundifolia</i>	Bláklukka				x						
<i>Cardamine nymanii</i>	Hrafnaklukka					x					
<i>Carex capitata</i>	Hnappstör				x						
<i>Carex rariflora</i>	Hengistör							x			
<i>Deschampsia caespitosa</i>	Snarrótarpuntur										x
<i>Epilobium alsinifolium</i>	Lindadúnurt					x					
<i>Geum rivale</i>	Fjalldalafifill									x	
<i>Juncus filiformis</i>	Þráðsef					x					
<i>Leontodon autumnalis</i>	Skarífifill				x						
<i>Potentilla crantzii</i>	Gullmura		x								
<i>Ranunculus acris</i>	Brennisóley				x						
<i>Thymus praecox</i>	Blóðberg		x								
<i>Hylocomium splendens</i>	Tildurmosi										
<i>Rhytidiadelphus squarrosus</i>	Engjaskraut	50*	90*	90*	90*	70*	40*	70*	60*	50*	70*
<i>Scorpidium revolvens</i>	Mýrkrækja	x				x					
<i>Calliergon giganteum</i>	Tjarnahrókur	20				20					
<i>Sphagnum teres</i>	Bleytuburi						40	20	x		
<i>Tomenthypnum nitens</i>	Lémosi	x					x		x	x	x
<i>Aulacomnium palustre</i>	Bleikjukollur	x							x		x

