Annex 2b. The Authorities responses - An overview of the conservation status for species, habitats, landscape features of the Breiðafjörður Nature Reserve

EMERALD PROCESS

The Breiðafjörður Conservation is currently not in the process of becoming an Emerald site. However, that could change, but a decision has not been taken by the authorities.

General information: Icelandic nature conservation law has a provision regarding a national Nature Conservation Registry. It's the Icelandic Institute of Natural History (IINH) that suggests what areas should be registered in the B-part of that registry. In 2018 IINH suggested that 112 areas in Iceland should be registered into the B-part the registry, as well as suggesting that those areas would be Iceland's proposed areas to the Emerald Network. These 112 areas have been under assessment by the ministry and the Environment Agency of Iceland. The assessement requires thorough cooperation with local municipalities, landowners and other stakeholders. When that process is finished the Minister for the environment brings a resolution to parliament, where the resolution goes through severeal discussion phases before it is voted on. It is then the Parliament that decides what areas will be placed into the B-part.

CONSERVATION STATUS

- Act No. 54/1995, on the Protection of Breiðafjörður- the act does not specify certain habitats or species.
- Within the area several islands are protected according the Icelandic Conservation Act (Hrísey, Melrakkaey, Flatey). Also a part of Vatnsfjörður nature reserve is within Breiðafjörður Conservation area
- Legislation on prohibitation of seal hunting in Breiðafjörður.
- The area is a conservation area in physical planning
- The are is registered as an Important Bird Area
- As in other parts of Iceland soem species are protected under the Act on the conservation, protection and hunting of wild birds and mammals
- As in other parts of Iceland Article 61 of Act no. 60/2013 on nature conservation grants certain natural phenomena special protection for ecosystems and geoheritage sites (mudflats, salt marshes, hot springs, wetlands on islands).

BIRDS

From the report Important Bird Areas in Iceland (2017)

IBA – Seabird colonies

Breiðafjörður, W-Iceland, is a large bay with thousands of islands and skerries and extensive intertidal zones. In this section, only breeding seabirds will be dealt with. The area holds internationally important numbers of Fulmarus glacialis (36,434 pairs), Phalacrocorax carbo (3,271 pairs), Phalacrocorax aristotelis (4,117 pairs), Somateria mollissima (60,000 pairs), Larus marinus

(3,500 pairs), Rissa tridactyla (10,313 pairs), Sterna paradisaea (15,000 pairs), Cepphus grylle (2,000 pairs) and Fratercula arctica (377,250 pairs).

Key bird species breeding in Breiðafjörður.

Tegund Species	Latneskt heiti Scientific name	Árstími Season	Fjöldi (pör) Number (pairs)	Ár Year	Hlutfall af íslenskum stofni (%) Percentage of Icelandic popul. (%)	Alþjóðlegt mikilvægi International importance*
Fýll¹	Fulmarus glacialis	В	36.434	1975– 2013	3,0	B2
Dílaskarfur ²	Phalacrocorax carbo	В	3.271	2007	72,6	B1i
Toppskarfur ³	Phalacrocorax aristotelis	В	4.117	2007	84,0	A4i, B1i
Æður⁴	Somateria mollissima	В	60.000	1999	20,0	A4i, B1i, B2
Hvítmáfur⁵	Larus hyperboreus	В	522**	2005– 2011	21,8	
Svartbakur ⁶	Larus marinus	В	3.500	2016	49,6	A4i, B1i
Rita ⁷	Rissa tridactyla	В	10.313	2006	1,8	B2
Kría ⁶	Sterna paradisaea	В	15.000	2016	7,5	A4i, B1i
Teista ⁶	Cepphus grylle	В	2.000	2016	16,0	B1ii
Lundi ⁸	Fratercula arctica	В	377.250	2014	18,6	A1, A4ii, B1ii, B2
Alls – Total			512.407			A4iii

^{*}Skýringar: 1. tafla, 2. viðauki. – Explanations: Refer to Table 1 and Appendix 2.

- 1. Arnþór Garðarsson o.fl., í prentun a. Arnþór Garðarsson et al., in press a.
- 2. Arnþór Garðarsson 2008.
- 3. Arnþór Garðarsson og Ævar Petersen 2009.
- 4. Jónas Jónsson 2001, Árni Snæbjörnsson, óbirt heimild. Jónas Jónsson 2001, Árni Snæbjörnsson, unpublished source.
- 5. Ævar Petersen o.fl. 2014. Náttúrufræðistofnun Íslands, gróft mat. IINH, rough estimate.
- 6. Arnþór Garðarsson o.fl. 2013
- 7. Arnþór Garðarsson og Erpur Snær Hansen, í undirbúningi. Arnþór Garðarsson et al. 2013, Arnþór Garðarsson and Erpur Snær Hansen, in prep.

Other birds

Tegund	Latneskt heiti	Árstími	Fjöldi	Ár Year	Hlutfall af	Alþjóðlegt
Species	Scientificname	Season	(pör)		íslenskum	mikilvægi
			Number		stofni (%)	International
			(pairs)		Percentage	importance*

^{**}Flest vörpin eru í fjöllum sem liggja að verndarsvæði Breiðafjarðar. – Most breed in cliffs adjacent to the Breiðafjörður Nature Reserve.

					of Icelandic popul. (%)	
Lómur¹	Gavia stellata	В	100**	2016	6,7	A4i, B1i
Álft¹	Cygnus cygnus	N	3.201	2005	12,3	A4i, B1i
Grágæs²	Anseranser	В	1.700**	1997	6,4	B1i
Grágæs2	Anseranser	N	2.500	1997	3,1	B1i
Margæs ³	Branta bernicla	Р	15.522	1990– 2010	55,4	A4i, B1i
Æður ⁴	Somateria mollissima	N	36.000	1980	4,3	A4i, B1i, B2
Straumönd ⁵ ***	Histrionicus histrionicus	W	1.626	1999– 2001	11,6	A4i, B1i
Toppönd ⁶	Mergus serrator	В	450**	2016	15,0	A4i, B1i, B2
Haförn1	Haliaeetus albicilla	В	47**	2016	63,5	
Rauðbrystin gur ⁷	Calidris canutus	Р	170.000	1990	48,6	A4i, B1i, B2
Sendlingur ⁷	Calidris maritima	Р	5.210	1990	10,4	A4i, B1i
Sendlingur ⁸	Calidris maritima	W	2.368	2017	4,7	A4i, B1i
Tildra ⁷	Arenaria interpres	Р	10.000	1990	6,7	A4i, B1i
Alls - Total****			200.732			A4iii

^{*} Skýringar: 1. tafla, 2. viðauki. – Explanations: Refer to Table 1 and Appendix 2.

- ** Pör. Pairs.
- *** Öndverðarnes–Látrabjarg.
- **** Fargestir. Passage migrants only
 - Náttúrufræðistofnun Íslands, óbirt gögn. IINH, unpublished data.
 - Ólafur Einarsson 2000.
 - Guðmundur A. Guðmundsson, óbirt heimild. Guðmundur A. Guðmundsson, unpublished source.
 - Arnþór Garðarsson 1982.
 - Arnþór Garðarsson og Þorkell Lindberg Þórarinsson 2003.
 - Náttúrufræðistofnun Íslands, gróft mat. /IINH, rough estimate.
 - Arnþór Garðarsson og Guðmundur A. Guðmundsson 1991.
 - Böðvar Þórisson o.fl. 2017.

HABITATS

EUNIS categories

Priority habitat types for protection

Habitat type	Conservation value	Km2	% of total area
Gulþörungaleirur	medium	0,81	35
A2.323 Tubificoides benedii and other oligochaetes in			
littoral mud.			
Klóþangsfjörur	Very high	49,65	71
A1.31 Fucoids on sheltered marine shores.			
Klóþangsklungur	Very high	104,06	90
A1.3142 Ascophyllum nodosum on full salinity mid			
eulittoral mixed substrata.			
Kræklinga - og sölvaóseyrar	Medium	0,42	77
New category sugestion: A1.13 Mytilus and Palmaria			
estuarine shore.			
Marhálmsgræður 1)	Medium	3,60	35
A2.61 Seagrass beds on littoral sediments.			
Sandmaðksleirur	High	37,94	25
A2.241 Macoma balthica and Arenicola marina in muddy			
sand shores.			

1) Annex I – Bern Convention

SEAL

Current% of Icelandic stock

Tegund	Lægstifjöldi* Lowest number *	Hæstifjöldi* Highest number *	Hæsta% af islenskum stofni Highest% of Icelandic stock	Núverandi% af islenskum stofni Current% of Icelandic stock
Útselur (Halichoerus grypus)	142 (1985)	1.311 (1989)	65,6 (1998)	63,9 (2017)
Landselur (Phoca vitulina)	462 (2016)**	2.552 (1980)	18,7 (1985)	11,7 (2018)

^{*}Útselur- Árin 1982–2017

Grey seal - *Halichoerus grypus* is distributed all around Iceland but the highest density of their colonies is in the northwest and southeast regions. Red listed: Iceland VU, Europe LC

The Halichoerus grypus population in Iceland was estimated 6.200 individuals in 2017, corresponding to 32% since 1982 (no estimates before 1982). An estimated, projected decline for full three generations (1982–2031) match ≥42% decline. This is compatible to the IUCN criteria of VU

^{*}LandselurÁrin 1980–2018

^{**}Árið 2014 voru taldir 132 landselir á tveimur svæðum í Breiðafirði. Ekki er talið að þetta talningarár sé marktækt og því ekki skráð fyrir lægsta fjölda.

A4b: An observed, estimated, inferred, projected or suspected population reduction where the time period must include both the past and the future, and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible (A4). Based on (b) an index of abundance appropriate to the taxon (IUCN). The Halichoerus grypus population in Iceland was listed as ENA4b in 2018 but has been downlisted due to an increase in population size since 2012.

Report: Aerial census of the Icelandic grey seal (Halichoerus grypus) population in 2017: Pup roduction, population estimate, trends and current status https://www.hafogvatn.is/static/files/hv2019-02.pdf

Harbour seal - Phoca vitulina is distributed all around Iceland but the highest density is in the northwest and southeast regions.

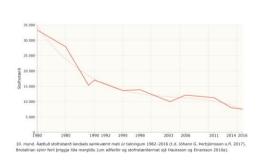
The Phoca vitulina population in Iceland was estimated 9.434 (CI 95% = 6.149-12.726) individuals in 2018, corresponding to 72% decline since 1980 when the population was estimated to be 33.000 individuals (no estimates before 1980). An estimated, projected decline for full three generations (1980–2025) match up to 77,5% decline. With reference to the wide 95% Confidence limits, this is compatible to the IUCN criteria of CR A4b: An observed, estimated, inferred, projected or suspected population reduction where the time period must include both the past and the future, and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible. Based on (b) an index of abundance appropriate to the taxon (IUCN).

Report: Aerial census of the Icelandic harbour seal (Phoca vitulina) population in 2016: Population estimate, trends and current status / Landselstalning 2016: Stofnstærðarmat, sveiflur og ástand stofns. Haf- og Vatnarannsóknir / Marine and Freshwater research in Iceland. HV 2017-009. ISSN 2298-9137

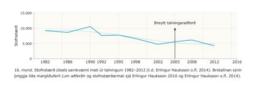
Text from: SELALÁTUR VIÐ STRENDUR ÍSLANDS https://utgafa.ni.is/fjolrit/Fjolrit 56.pdf

ABSTRACT

Two species of seals live and breed in Icelandic waters and shores, the harbour seal (Phoca vitulina) and the grey seal (Halichoerus grypus) and few other seal species visit Iceland, irregularly. The harbour seal population has been monitored on regular basis, with direct counts (aerial censuses) since 1980 and the grey seal since 1982. Harbour seals are counted in mid-summer, during the moulting period and grey seals are counted during their breeding period in the autumn. The locations onshore, where seals breed, tend their pups, moult and rest, are termed as "haul-out" (Icelandic: látur). These locations are vital for sustaining the native seal populations, as individual seals are loyal to and visit the same haulout locations, year after year.



Harbour seal: estimated populatioon size accoding to countings in 1982 - 2016



Grey seal – population according to estimates from countings in 1982-2012