

Ramsar Convention Monitoring Procedure

[Report No. 30, 1992. Myvatn-Laxá Ramsar site, Iceland]

Mr Eidur Gudnason
Minister of the Environment
Ministry of the Environment
Reykjavik, Iceland

6 July 1992

Dear Minister

Re: Maintaining the ecological character of the Myvatn-Laxá Ramsar site

When you received the Ramsar delegation in Reykjavik on 26 June, you indicated that you would welcome a statement from the delegation on the Myvatn-Laxá Ramsar site. Dr. Rees and I have tried to summarize our views in the present letter.

1. Background

When Iceland deposited its instrument of accession to the Ramsar Convention with the Director General of UNESCO on 2 December 1977, it designated Myvatn-Laxá as the first Icelandic wetland for inclusion in the Convention's "List of wetlands of international importance". In so doing, Iceland accepted the commitment "to formulate and implement its planning so as to promote the conservation of the wetlands included in the List" (Article 3.1 of the Convention).

The Icelandic national report to the third meeting of the Conference of the Contracting Parties (held in Montreux, Switzerland, in June/July 1990) indicated that "dredging of a part of Lake Myvatn for the extraction of diatomite was started in 1967 and has now affected 6-7% of the lake's bottom. The environmental impact of dredging is being studied. A decision as to what extent dredging will be allowed to continue will be made in 1991". Following discussion of national reports in the Montreux workshop on "Conservation of listed sites", the plenary session of the Conference approved Recommendation 4.9; after "expressing concern at the statements made at the Conference or in their national reports about change in ecological character in listed wetlands" by a number of delegations, this recommendation comments on the conservation of the ecological character of specific Ramsar sites in several countries; one paragraph calls on the Government of Iceland to "take full note of the results of ecological research into the impact on the Myvatn-Laxá Ramsar site of sediment dredging before deciding to continue this activity".

In its Recommendation 4.8, the Montreux Conference also instructed the Ramsar Bureau to maintain a record (now known as the "Montreux Record") of Ramsar sites where "changes in ecological character have occurred, are occurring or are likely to occur". In the light of information in the Icelandic national report, Myvatn-Laxá was one of 44 sites in 23 states included in this Montreux Record. By the same recommendation, the Conference instructed the Ramsar Bureau to "give priority to application of the Ramsar Monitoring Procedure at sites included in this record".

In 1991, the Ramsar Bureau received a copy of the July 1991 report of the Committee of Experts for Lake Myvatn Research on “Effects of the Operations of Kisilidjan Inc. on the Lake Myvatn biota”, and of the “Statement of the Nature Conservation Council on diatomite mining in Myvatn”. The Ramsar Bureau wrote to you in October 1991 and in June 1992 suggesting application of the Ramsar Monitoring Procedure at Myvatn. As a result, a visit to Iceland was arranged by a Ramsar delegation, made up of the undersigned, Assistant Secretary General of the Convention, and of Dr. Eileen Rees, Principal Research Officer of the Wildfowl and Wetlands Trust in UK, who has extensive previous experience of Myvatn. The Ramsar Bureau regards this visit as a preliminary mission which could, if appropriate, lead to a full application of the Ramsar Monitoring Procedure at a later stage.

2 Programme of the Ramsar delegation

During their visit from 25-30 June, the delegation met the following persons concerned with the conservation and wise use of the Myvatn-Laxá & Ramsar site:

Minister Eidur Gudnason and Dr. Jón Gunnar Ottósson, Head of Division, of the Ministry of the Environment;

Council members of the Nature Conservation Council, during their regular meeting on 26 June;

Biologists from the Institute of Biology, University of Iceland, and in particular Prof. Arnthor Gardarsson and Prof. Gísli Már Gíslason;

Staff and students of the Myvatn Research Station, in particular Dr. Árni Einarsson;

Farmers and fishermen of the Myvatn area (several of whom are members of the Board of the Myvatn Research Station), including the whole Board of Directors of the Myvatn Fishing Association and the Chairman of the Laxá and Kraka Fishing Association;

Mr. Sigurdur R. Ragnarsson, Mayor of Skutússtadahreppur, who was also a member of the Committee of Experts and is on the Board of the Myvatn Research Station;

Dr. Fridrik Sigurdsson, General Manager of Kisilidjan hf (The Icelandic Diatomite Plant, Ltd.);

Staff of the National Physical Planning Agency, Reykjavík.

The delegation spent two days in the area of Myvatn-Laxá, during which Dr. Fridrik Sigurdsson took the members on a guided tour of the Kisilidjan plant. In Reykjavík, it had a number of meetings and are most grateful to the Nature Conservation Council for arranging the programme and for hospitality. The delegation feels that, during its short visit, it received a very full presentation of the situation at Myvatn-Laxá.

3. Importance of Myvatn-Laxá

There can be no doubt whatsoever of the importance of Lake Myvatn and the River Laxá, at both national and international level.

The national importance of the area was recognised by the Althing when it approved Law 36/1974 on conservation of the area. It was a natural progression to designate Myvatn-Laxá as Iceland's first Ramsar site when Iceland became a Contracting Party to the Ramsar Convention.

Myvatn-Laxá undoubtedly merits its status as a Ramsar site for a number of reasons, related to its high biological productivity and complexity as an ecosystem, its biodiversity, and its importance for human communities in the surrounding area.

In terms of biological productivity, the Laxá is one of the best salmon and trout rivers in Iceland, while Myvatn is a rich producer of Arctic charr. The lake and river system together make the area one of the most productive areas for waterfowl in the world; the system is a perfect example of a northern wetland which produces waterfowl that migrate southwards to winter in other countries, and where international cooperation is therefore required. The fish and waterfowl form part of a complex food-chain, involving the sub-aquatic vegetation and benthic invertebrates necessary for the survival of the higher organisms.

Furthermore, this complex system is an outstanding example of biodiversity in a comparatively small area and supports species of waterfowl such as Harlequin Duck and Barrow's Goldeneye which are rare in Europe but occur in unusually high concentrations at Myvatn-Laxá. The presence of volcanic phenomena and live geothermal activity in the immediate neighbourhood increases the remarkable interest and educational value of the area.

Local people have long exploited the fisheries and have made wise and sustainable use of the abundant summer supply of ducks' eggs and fish. There is a strong sense of local pride in a traditional way of life. The lake and river have long sustained water supplies for drinking and agriculture. In recent years, ecotourism has provided additional revenue, while salmon fishing on the Laxá has become very profitable - not only for the people of Skútusstadahreppur, but also for communities downstream in Reykdælahreppur, Adaldælahreppur and Reykjahreppur. The diatomite factory itself has in recent years provided additional revenue and jobs.

4. The current mining situation

The crucial question is whether the extraction of diatomite will impoverish and eventually destroy this unique site. As the mayor of Skútusstadir told us, local people - if confronted with a choice between wetland and factory - would unhesitatingly choose the wetland. Is it possible to have both? It is our understanding that a definitive decision about the "extent to which dredging will be allowed to continue" (to quote from the Icelandic report to the Montreux Conference) could not be made in 1991. We understand that the current mining permit envisages mining up to August 2001, but that this is subject to periodic authorizations. The current authorization is valid until 31 March 1993. The Nature Conservation Council has argued for a phased and orderly conclusion of mining, so that mining would cease after exploitation of the northern basin of the lake; the Kisilidjan Company, on the other hand, has requested, for commercial and planning reasons, that an authorization to mine should be granted not only for the northern basin, but for a three to five year period in the Bolir area of

the southern basin of the lake. The Icelandic authorities must decide in the near future on whether the authorization is to be extended, for how long, and in which area.

5. Comments from the Ramsar delegation

There is general acceptance of a substantial decline in the numbers of Arctic charr in the lake in recent years. A decrease in duck populations is also reported by both farmers and scientists, although there are insufficient historical data to assess long-term fluctuations in duck numbers. Within the area of diatomite excavation in the northern basin of the lake, there has been disturbance of the bottom sediment (which contains organic matter necessary for the survival of the lower organisms) and a loss of macrophytic plants, and a bias has arisen in the distribution of waterfowl in the lake, with lowest concentrations of ducks occurring in the dredged area.

The diatomite excavation has been accused of causing the decrease in overall productivity of the lake; however, as pointed out in paragraph 10 of the Conclusions of the Expert Committee's July 1991 report, there is no conclusive proof of a link between mining and the decrease.

It is clear that dredging the lake removes the food supply for Chironomid larvae and crustaceans, which form a major part of the diet of birds and fish. Moreover there is evidence of transport of sediment from shallow parts of the lake to the dredged area in the northern basin, which may in future affect nutrient budgets and food availability, particularly to the lower organisms that form the first stage of the food chain. Nutrient loading, and particularly the increase in nitrogen levels caused by the operation of the Kisilidjan Company, is also a major cause for concern. We understand that the question of sediment transport is now being studied in further detail, with a view to improving the accuracy with which the rate and extent of bottom erosion outside the immediate area of mining can be predicted.

In this context, we would emphasize the difficulty of making precise predictions about changes in systems as complex as Myvatn-Laxá, and would draw your attention to the "Precautionary Principle" enunciated by the Governments of Denmark, Germany and the Netherlands in their joint planning of the Vadehavet (Wadden Sea) Ramsar site shared by the three states:

"The common policies as laid down in the Joint Declaration on the Protection of the Wadden Sea from 1982, will be further implemented based on:

(iii) the Precautionary Principle, ie. to take action to avoid activities which are assumed to have significant damaging impact on the environment, even where there is no sufficient evidence to prove a causal link between activities and their impact"

(see attached extract from the Danish/German/Netherlands document for further information).

This precautionary concept has also been incorporated into the preambular paragraphs of the Biodiversity Convention, recently adopted at Rio de Janeiro, in the following formulation:

“The Contracting Parties Noting also that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat”.

Another Ramsar site which was the subject of a recommendation at the Montreux Conference was Doñana in Spain. There, an expert commission has recently produced a report for the Andalusian Government on future socio-economic development of the surrounding region, and the report has been favourably received by the authorities. The Doñana Commission suggests that development should be based on careful use of the natural values of the region, and on improving the quality and marketing of local produce, rather than on establishment of massive new tourist facilities and expanded irrigation. This message of encouraging long-term use of natural productivity, of not “killing the goose which lays the golden eggs”, seems relevant to Myvatn-Laxá too.

The delegation was impressed by the conviction of both scientists and local people that Myvatn-Laxá is a unique site, where conservation should be the highest priority and where damaging operations should be prohibited as a matter of principle. (It was not, on the other hand, convinced by the argument that the lake is in any case silting up and that deepening by diatomite dredging will prolong its life; the siltation will not be completed for many hundreds of years, and removal of the lake’s biological wealth is a poor justification for extension of its existence).

Ultimately the delegation received the strong impression that conservation and wise use of the Myvatn-Laxá system is a matter of national (as well as international) concern, and that the Icelandic government has positively reflected this concern by designating the area as a Ramsar site.

The decision which the Icelandic authorities must make on the future of diatomite mining in the Ramsar site is a matter of great interest at local, national and international level. The Ramsar delegation is aware that further detailed studies are in progress and would not wish to prejudge their conclusions; it requests the Icelandic authorities to keep the Ramsar Bureau informed of any developments and to present a report to the next meeting of the Conference of the Contracting Parties (to be held in Japan in June 1993) on the Committee’s progress and on action taken in respect of the Montreux recommendation on Myvatn-Laxá.

The Ramsar Bureau is willing to provide help in any way possible, for example by providing information from other relevant Ramsar sites or by carrying out a full application of the Ramsar Monitoring Procedure at some time in the future.

This letter is being copied to the Nature Conservation Council in its capacity as Administrative Authority responsible for implementation of the Ramsar Convention in Iceland.

With best wishes.

Yours sincerely

Michael Smart
Assistant Secretary General

cc: Nature Conservation Council.
Eileen Rees, Martin Mere IWRB, Slimbridge