



Strasbourg, 28 June 2002  
[tpvs2002\file02e\_2002]

**T-PVS/Files (2002) 3**

**CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE  
AND NATURAL HABITATS**

**Standing Committee**  
22<sup>nd</sup> meeting

Strasbourg, 2-5 December 2002

---

**Specific File**

**Afforestation of low land  
in Iceland**

**Report of an on-the-spot appraisal undertaken  
for the Council of Europe  
(29 May – 2 June 2002,)**

by  
Michael B Usher

*Secretariat Memorandum  
Prepared by  
The Directorate of Culture and of Cultural and Natural Heritage*

## 1. Introduction

The Secretariat of the Bern Convention received a report from Birdlife International (BLI) and the Royal Society for the Protection of Birds (RSPB) on the afforestation of low lands in Iceland. BLI and RSPB complained that the Icelandic policy of subsidising afforestation represents a major threat to breeding, passage and wintering populations of bird species of outstanding international importance.

The matter was considered at a meeting of the Standing Committee, held in Strasbourg between 26 and 30 November 2001. The delegate of BLI expressed the view that afforestation would impact on the population of several bird species and that guidance for Environmental Impact Assessments may not be completely appropriate for some of the afforestation schemes. The view was expressed that afforestation could be in contravention of several articles of the Bern Convention. The delegate of Iceland, however, stated that it was unlikely that any bird species protected under the Bern Convention would suffer a considerable impact. The Icelandic Government was aware that there were potential threats to habitats and species, and it indicated that such impacts would be kept to a minimum. The Standing Committee “accepted the offer from Iceland regarding the on-the-spot appraisal and decided to place the issue in the agenda of its next meeting as a ‘possible case file’.”. This report provides the on-the-spot appraisal.

## 2. Programme of the visit

Dr Eladio Fernandez-Galiano, Head of the Natural Heritage and Biological Diversity Division in the Council of Europe, and I travelled to Iceland on Wednesday 29 May 2002. That evening we met Ingimar Sigurdsson, the Deputy Secretary General of the Ministry of the Environment, and one of his staff, Matthildur Stefansdottir. Ingimar Sigurdsson also joined us on 31 May in Egilsstaðir and for the journey to Mývatn.

On the morning of Thursday 30 May we travelled with representatives of the Ministry of the Agriculture, the Iceland Forest Service and the Icelandic Institute of Natural History to see afforestation schemes (proposed, young and reasonably old) located at Geysir, Haukadalshéiði and Skálholt (i.e. afforestation in southern Iceland). During the afternoon we met with four groups – (1) the Nature Conservation Agency, (2) the Physical Planning Agency, (3) the Icelandic Institute of Natural History, and (4) representatives of the non-governmental organisations (Icelandic Forestry Association, National Association for the Protection of the Icelandic Environment, Iceland Nature Conservation Association and Icelandic Society for the Protection of Birds).

After a flight from Reykjavík to Egilsstaðir on Friday 31 May, we visited one of the oldest forests with a commercial timber species in Iceland, on the south-eastern shore of Lagafljót. The visits to eastern Iceland were arranged by Dr Þröstur Eysteinnsson, the Deputy Director of the Iceland Forest Service. We were accompanied by Jón Loftsson, the Director, Aðalsteinn Sigurgeirsson, the Director of the Forest Research Branch, and several of their staff. We were introduced to the Forest Biodiversity Research Programme, to the planning of an afforestation scheme at Tókastaðir, and to problems with afforestation on land in private ownership at Héraðssardur. The day was designed to show us forestry in eastern Iceland, and ended with a drive from Egilsstaðir to Mývatn.

Saturday 1 June was mostly taken up with familiarisation of Iceland’s environment, including the geothermal area of Namaskarð and the birdlife of the Mývatn area. However, it also provided the opportunity to see areas of serious soil erosion, particularly on the road from Mývatn to Húsavík, as well as native birch woodlands with blocks of non-native coniferous trees on hillsides, clearly visible from the road from Húsavík to Akureyri. We therefore also gained an interesting perspective on afforestation in northern Iceland.

### 3. Background to the Icelandic environment

A useful background to the environment of Iceland, in comparison with the environment of other Nordic nations, is given by Bernes (1993). Perhaps two of the most telling quotations are “forests grew in many parts of Iceland when the Vikings arrived there over a thousand years ago, but felling and grazing since then have left the island virtually treeless” (page 15) and “volcanic eruptions and over-grazing have reduced large areas of Iceland to a barren desert” (page 103). The serious state of soil erosion in Iceland is well illustrated by the map on pages 110-111 of Arnalds *et al.* (2001). In the latter publication, the land area not under permanent ice is allocated to one of four classes – soils in good condition, in satisfactory condition, in poor condition and in bad condition. Large areas of lowland soil are assessed as being in poor or bad condition.

Given this change in the Icelandic environment over the last 1000 years, it is no surprise that the forest cover in Iceland is the lowest of any of the Nordic nations (Hallanaro & Pylvänäinen, 2002, page 210). It is estimated that woodlands, both natural and plantation, cover about 1.4% of Iceland’s land area, but that at the time of settlement about 25 to 30 percent could have been covered with trees or scrub (Anonymous, 2001). It is against this background of loss of woodland and serious soil erosion that the Iceland government has a stated aim of increasing the woodland cover of low land (land below approximately 300m altitude) to 5% over a 40-year period. As given by Anonymous (2001), over the period for 1993 to 1999, nearly 27 million trees were planted, 33.7% being broadleaf species (birch, poplar and willow), 63.2% being conifers (spruce, pine and larch) and 3.1% being ‘other species’ which were undefined.

It is this policy of afforestation in the low lands which has given rise to concern for the bird populations that either nest, or feed during migration, in these open, treeless habitats. A 1:500,000 vegetation map has been published (Guðjónsson & Gíslason, 1998) demonstrating that much of the area available for afforestation is classified as heath, grassland and wetland, though some of the lowland areas are also cultivated (agricultural) land.

Large numbers of birds do indeed inhabit the low lands of Iceland, at least for parts of each year. Figures are quoted in the paper from BLI and RSPB, but more up-to-date information is given in Iceland’s Red Data List of birds (Ingadóttir, 2000) and in the survey report by Gudmundsson (2002). In the introduction to the Red Data List, Jón Gunnar Ottósson, the Director of the Icelandic Institute of Natural History, says “one of the major threats to Iceland’s birds in the coming years is extensive and uncontrolled afforestation which will, among other things, lead to further destruction of wetlands and alteration of upland bird habitats ... If these plans go ahead without an Environmental Impact Assessment, it is likely that more bird species will be red-listed in the future” (page 9, unofficial translation from Icelandic to English).

Throughout the on-the-spot appraisal, these two contradictory elements continually emerged. On the one hand, the importance of soil conservation measures and the need for re-establishment of a vegetative cover of woody species was clear. So much of Iceland’s environment has been damaged that expressions such as “barren desert” (Bernes, 1993) seem justifiable. On the other hand, the nature of the bird communities is outstanding, with Iceland providing a rich resource in a European context. Environmental improvement, by soil conservation and tree planting, and nature conservation, especially of the bird species, are both important long-term objectives. The question is ‘How can both be achieved?’.

### 4. Findings of the on-the-spot appraisal

From the discussions with many people in Iceland, from the field visits, and from reading material given to us in Iceland (and other material quoted in the reference list), I have formed views on 12 topics. Each of these is discussed neutrally in this section of the report, and several of them are developed into recommendations in the next section (section 5).

#### 4.1. *Iceland’s international obligations*

The nation of Iceland ratified the Ramsar Convention in 1977, the Bern Convention in 1993, and the Convention on Biological Diversity in 1994. Iceland has therefore voluntarily entered into obligations relating to the conservation of wildlife and natural habitats, wetlands, and the care of its

biological diversity. Although each convention is separate, they nevertheless overlap to some extent. Iceland's acceptance of these conversions is a critical factor in considering the possible effects of afforestation on lowland habitats.

#### 4.2. *Protection of wetlands*

Iceland's report to the Convention on Biological Diversity (Anonymous, 2001) states "As a result of major drainage and cultivation of wetlands, there are only a few undisturbed wetlands left in the lowlands, which affects the flora and fauna in these areas. After the Second World War extensive programmes, subsidised by the authorities, were initiated to drain and cultivate wetlands, and over a period of 50 years more than 31,663 km of ditches were dug, draining approximately 10,000km<sup>2</sup> of wetlands, at least 60-75% of all lowland wetland areas and even more in certain areas of the country" (page 47). It is difficult to obtain accurate data since there is no survey of the area of the wetlands in the 1940s, but we were frequently told that about 90% of the wetland area had been lost due to drainage. It would be useful if old aerial photographs were available so that Iceland could conduct a sample study of land cover change similar to that in Scotland (Mackey *et al.* (1998) reported on land cover change in Scotland from the late 1940s to the early 1970s, and from then to the late 1980s, giving statistically accurate changes in 31 land cover types, including wetlands, and in 5 types of linear features, including ditches). There was universal agreement that a large proportion of Iceland's wetlands had been drained, though it was evident that not all drainage schemes had been successful in achieving their aim.

#### 4.3. *Protection of natural birch woodlands*

Again quoting from Anonymous (2001), "Iceland has lost over 95% of its original birch woodlands, which today cover only about 1% of the total area" (page 6) and "the only native tree in Iceland that forms woodlands is birch (*Betula pubescens*) ... Eighty percent of the birch is shrub-like, less than 2m in height. Only 2 percent of the woodlands have trees 8-12m tall, and these are mainly found in the valleys of north and east Iceland and in the vicinity of the glaciers in the south" (page 12). Birch woodlands are important for protecting soil from erosion, for supporting a diversity of wildlife (including birds), and as the only natural habitat in Iceland with dominant woody vegetation. We saw examples, particularly in the north, where blocks of non-native coniferous species had been established within taller, natural birch woodlands. We queried this, and were told that the coniferous trees established themselves better within the shelter provided by the birch.

#### 4.4. *Protection of the special habitats*

Iceland has a variety of other special habitats besides lowland wetlands and birch woodlands. For example, we visited Námaskarð, near Mývatn, said by Anonymous (2001) to be "one of a few protected geothermal areas" (page 8). The diversity of natural habitats, from permanent glaciers to hot-temperature geothermal areas, is probably unique in Europe. We were unable to determine to what extent there was an inventory of these many special habitats, or whether they were all represented within Iceland's system of protected areas (see section 4.10).

#### 4.5. *The nature of afforestation*

The Iceland Forest Service produced a 14 page report on its activities (Eysteinnsson, 2002). This shows that in 2000, of probably about 4 million trees planted, 32% were native species (29% birch and 3% willow), with 53% non-native conifers, 8% non-native broadleaf species, and 7% an undefined mixture of other species. In eastern Iceland, the vegetation types mapped for afforestation included 52% heathland, 31% grassland, 11% wetland, 1% woodland and 5% other types including eroded land. It was clear that afforestation schemes are targeted at heathland and grassland, but that some wetland areas as well as remnant native woodlands might also be included.

Much of the land to be afforested is in private ownership. The nation has few powers to control what a private owner does with his or her own resources (land and money). However, most afforestation is funded by generous loans (97% of establishment costs), to be paid back by 15% of the value of all eventual income from the sale of forest produce (timber, bark or wood chips, etc.). The conditions attached to such loan/grant finance for private individuals potentially allow the nation to exert considerable influence on which species are planted, and on which areas of land are afforested.

In both south and east Iceland we saw very detailed planting plans. These took cognizance of the landowner's wishes, the habitat types on the ground, and the possibilities for tree growth; in one of the schemes that we saw that a landscape architect had been consulted. Both schemes that we saw were less than 200ha in extent and were essentially the advice from the local foresters to the local landowner. We noted that such plans were very time-consuming to produce and that they were not checked by the headquarters staff of the Iceland Forest Service in Egilsstaðir. There was clearly room for disagreement (even within the Forest Service) and eventual compromise.

Finally we noted Eysteinnsson's (2002) conclusion that "those of us who plant trees have taken on the responsibility of restoring lost resources and ecosystems. It is relatively easy to shoulder the additional responsibility of making sure that in so doing we avoid damaging other values in the landscape" (page 14). The avoidance of damage is critical in the restoration of an eroded land surface and of the enhancement of remnants of natural ecosystems.

#### *4.6. Planning*

Much conflict can potentially be avoided by careful and open large-scale planning. We noted that the aim is to afforest 5% of the land area of Iceland below 300m over a 40 year period. As some of this land is unsuitable for afforestation (under ice, sandur plains, rivers, built-up areas), it means that a larger percentage of the potentially vegetated land could be planted with trees.

Iceland has 105 municipalities. By 2008 each of these will have to have prepared a physical plan which, on the advice of the Planning Agency, will be accepted or rejected by the Minister for the Environment. We discussed with the Planning Agency the land use aspects of these plans as this could form an indicative basis for where conversion to forestry could be appropriate and where it would be inappropriate. We also discussed the need for Environmental Impact Assessments (EIAs) for forestry schemes in excess of 200ha or where they impinge on a designated nature conservation area.

One of the NGOs pointed out to us that in the north of Iceland there were several afforestation schemes less than 200ha in extent, but that the forestry plan for the whole of the north of Iceland should be available for public consultation. The conflict here appeared to be related to the (arbitrary) 200ha threshold for the requirement of an EIA of an individual afforestation scheme when, within a reasonably restricted geographical area, several schemes each under 200ha may add up to a much larger overall afforestation programme.

#### *4.7. Cumulative effects of forestry*

We were unclear how the 200ha threshold was calculated. A road was apparently seen as a barrier, so that an afforestation scheme on one side of the road was treated separately from a scheme on the other side. An afforestation scheme on land in one ownership is treated separately from an adjacent scheme in another ownership. There therefore appeared to be the potential for a large and generally contiguous area to be afforested by several schemes, each of which was individually under 200ha in extent. There appeared to be no mechanisms for addressing the cumulative impacts of afforestation.

#### *4.8. The size of the threshold for EIAs*

There was considerable discussion about what could replace the 200ha threshold. The Planning Agency suggested to us that 40-50ha in aggregate would be appropriate. The nature conservation NGOs favoured a threshold of 50ha. Although the foresters did not argue against a reduction in the threshold, I formed the opinion that they were satisfied with the current level of 200ha.

#### *4.9. The nature conservation input*

Throughout it was stressed that Iceland was a large country (103,000km<sup>2</sup>) with a small population (283,000 people), giving a population density of about 2.7 people per km<sup>2</sup>. This compares with densities of 14 per km<sup>2</sup> in Norway, 21 per km<sup>2</sup> in Sweden and 120 per km<sup>2</sup> in Denmark (Tíveus & Emborg, 1995). There is, therefore, only a very small human resource to undertake ecological and biological survey work. The Nature Conservation Agency and the Icelandic Institute of Natural History are neither routinely nor statutorily consulted about afforestation schemes. Indeed, they are

probably not sufficiently staffed to be able to consider in detail plans for all of the afforestation schemes, and they do not have the resources to undertake EIAs themselves. There was also an issue of data that will be addressed in section 4.11.

#### 4.10. *A protected area network*

Iceland has established a number of protected areas, including 3 national parks and 35 nature reserves, as well as 4 large special protection areas and also 43 natural monuments and country parks. In total, the 85 protected areas cover 12,137km<sup>2</sup>, or about 11.8% of the land area of the country. Anonymous (2001) states that a nature conservation strategy “is now being prepared and will be introduced in Parliament in the year 2002. This strategy will emphasise the preservation of biological diversity, particularly through a better system of protected areas, the protection of endangered species, habitat types and ecosystems, and subsequently, the necessary management plans for threatened species and protected areas” (pages 31-32). Iceland has made a good start in its system of protected areas, is improving that system, but more progress could be made in relating its system to the international networks of protected areas.

#### 4.11. *Data networks*

One problem frequently raised in discussing EIAs was the lack of biological data. It is expensive to carry out new surveys each time an EIA is required, and surveys only have maximum value if the data for one site can be set in the context of many other sites. An impressive piece of work undertaken to estimate the population sizes of various bird species in Iceland is reported by Gudmundsson (2002), demonstrating that there are good data and that it is possible to make reasonable predictions. Several bodies corporately hold data, but we did not discover any well organised systems for data networking or data sharing.

#### 4.12. *Achieving a balance*

Soil erosion in Iceland is a serious problem. Many natural ecosystems have become degraded and are in need of restoration. There are therefore many environmental problems that need to be solved. Equally, Iceland has a very considerable number of birds, with estimates of 310,000 golden plover (*Pluvialis apricaria*), 270,000 dunlin (*Calidris alpina schinzii*) and 250,000 whimbrel (*Numenius paeopus*) being the most abundant waders (Gudmundsson, 2002). In thinking about the Bern Convention and the need for afforestation, we incline to the view that environmental protection and restoration is more important than attempting to achieve commercial forest production.

### 5. Recommendations

Having carried out an on-the-spot appraisal, I agree with the Director of the Icelandic Institute of Natural History, quoted in section 3 of this report, that extensive and uncontrolled afforestation could potentially have an impact on a number of bird populations. The bird species potentially affected are those of the lowland wetlands. However, this needs to be set against the potential for increasing the population sizes of forest birds and the possibility of new areas for nesting and feeding birds on land restored by the Soil Conservation Service.

There are, however, six recommendations that might assist in achieving a balance between the desire for increased land cover by woody species and the conservation of both birds and other special habitats and species in Iceland.

#### 5.1 *A biodiversity strategy for Iceland*

As a result of signing the Convention on Biological Diversity, many nations have prepared a Biodiversity Action Plan or a Biodiversity Strategy. Despite the excellent amount of work that has been done on Iceland's biodiversity (Anonymous, 2001), at the present time there is neither a strategy nor an action plan. The preparation of such a document, setting out actions and targets for Iceland's most valued (scientifically and culturally) biodiversity, would appear to be a priority. Undoubtedly both wetland and natural birch woodland habitats would feature in the document, which would set out targets for restoration. Such a document would provide the background against which afforestation schemes could be assessed.

## 5.2 *Indicative land use plans*

With physical plans being prepared over the next 6 years for each of the 105 municipalities, there is an opportunity to consider strategic land use issues. This could be of assistance to all major land users in Iceland, especially forestry, agriculture, biodiversity conservation and soil conservation. These plans could indicate where land could be found for afforestation as well as where land was essential for nature conservation or other forms of land use, including protection for freshwater fisheries. In a country where the majority of the land is in private ownership, there will inevitably need to be consultation on such strategic plans, but once accepted they would form a very powerful basis for considering all land use issues.

## 5.3 *Detailed forestry plans*

The plans for the two afforestation schemes that we saw at Geysir and Tókastaðir were very detailed. Both had been prepared by local foresters for farmers who were interested in converting part of their land from agricultural use to forestry. In one case there were disagreements between the foresters present about the plan. In the other case the farmer had not achieved everything that he wanted largely because the foresters had pointed out that it was just not feasible.

However, these detailed plans, which form the basis for loans/grants from the Iceland government, are not widely consulted. Consideration could be given to a period of statutory consultation, with certainly the Planning Agency, the Nature Conservation Agency and the Municipal Authority having to be consulted. The list of statutory consultees could be expanded to include interests related to agriculture, freshwater fisheries, soil erosion, natural history and environmental protection.

The Icelandic Government, in such a scheme, would have to draw up a list of statutory consultees appropriate to Icelandic society, and determine if the consultation should be open to all members of the public, what the role of the NGOs might be, and how long the consultation period should last (possibly three months). The Forest Service would need to consider any objections and to demonstrate how they have been able to reach an acceptable compromise. There may need to be an appeal mechanism if a compromise cannot be found.

## 5.4 *The role of Environmental Impact Assessments*

There is clearly concern about when EIAs are required. It might be appropriate to reduce the 200ha criterion to somewhere in the range of 40-50ha. It also seems appropriate to consider the cumulative effects of afforestation within a municipality so that an EIA cannot be avoided by having a number of neighbouring schemes all just under the threshold.

It does, however, have to be remembered that EIAs can be expensive and that the Planning and Nature Conservation Agencies do not have the resources to carry them out for owners. Is there a case to be made for including the cost of an EIA within the overall establishment costs of a forest, and thus paying for the EIA with loan/grant money?

If a system of statutory consultation was introduced (see section 5.3), then it may be possible to eliminate thresholds for EIAs. If no statutory consultee objected to a scheme, irrespective of its size, then no EIA would be required. Conversely, if there were strong objections from the statutory consultees for a small scheme (say, 35ha), then an EIA would have to be undertaken or the scheme withdrawn. There may therefore be benefits in having a rather more flexible approach to the requirements for an EIA.

## 5.5 *Networking of environmental (biodiversity) data*

One problem with undertaking an EIA, or considering a detailed afforestation plan, is the availability of data. It is wasteful of resources to collect data on a site *de novo* by each interested party. It therefore seems that a data centre, or a data network, is a possible way forward that would allow for data sharing and the use of data by all interested groups. Within the United Kingdom, a start has been made on this topic by the creation of the National Biodiversity Network (NBN). The NBN could be used as a model for a data network that would be suitable for Icelandic data providers and users. This could also be seen as a parallel development to the European Union's Environmental Information Directive.

### 5.6 *International protected area networks*

Iceland, being outside the European Union, is not directly participating in the Natura 2000 network of protected areas being developed as a result of the Birds Directive (1979) and the Habitats Directive (1992). However, a parallel network of protected areas is being developed throughout Europe, known as the 'Emerald Network'. Iceland could move further towards implementing these networks, designating appropriate sites as protected areas both for their habitats and for the species that these habitats support. The anticipated introduction of a nature conservation strategy into the Icelandic Parliament, in Autumn 2002, provides an opportunity for Iceland's protected areas to accord with the Natura 2000 and the Emerald networks of international protected areas.

## 6. Conclusions

Afforestation with non-native tree species clearly has the potential to damage the populations of some of the bird species listed in the annexes of the Bern Convention. There is, however, no evidence that afforestation has yet damaged any of these populations.

With careful planning, both at a strategic level and at the detailed level of an individual afforestation scheme, it appears that the most damaging impacts can be either avoided or mitigated. In this context, six recommendations are made (section 5). However, a priority in Iceland is to fulfil an obligation of the Convention on Biological Diversity, and to publish a 'Biodiversity Strategy' or 'Biodiversity Action Plan'. Such a document would highlight what is special about Iceland's biodiversity, and set out a strategic path towards its conservation, enhancement and/or restoration. The need to repair soil erosion, to develop a greater ground cover of woody species, and to conserve wildlife (including birds) would all feature, as would their context in relation to the economy of Iceland and its people.

## 7. References

- Anonymous (2001). *Biological Diversity in Iceland: National Report to the Convention on Biological Diversity*. Ministry of the Environment & Icelandic Institute of Natural History, Reykjavík.
- Arnalds, O., Þorarinsdóttir, E.F., Metusalemsson, S., Jonsson, A., Gretarsson, E. & Arnason, A. (2001). *Soil Erosion in Iceland*. Soil Conservation Service and Agricultural Research Institute, Gunnarsholt & Reykjavík.
- Bernes, C. (1993). *The Nordic Environment – Present State, Trends and Threats*. Nordic Council of Ministers, Copenhagen.
- Eysteinnsson, Þ. (2002). *Icelandic Forestry in 2002*. Unpublished report by the Iceland Forest Service, Egilsstaðir.
- Guðjónsson, G. & Gíslason, E. (1998). *Vegetation Map of Iceland, 1:500,000: General Overview*. Icelandic Institute of Natural History, Reykjavík.
- Gudmundsson, G.A. (2002). *Estimates of Breeding Populations of Icelandic Waders worked out for the "Breeding Waders of Europe 2000" Report*. Consultation draft prepared by the Icelandic Institute of Natural History, Reykjavík.
- Hallanaro, E.-L. & Pylvänäinen, M. (2002). *Nature in Northern Europe: Biodiversity in a Changing Environment*. Nordic Council of Ministers, Copenhagen.
- Ingadóttir, A. (editor) (2000). *Válisti 2: Fuglar*. Náttúrufræðistofnun Íslands, Reykjavík.
- Mackey, E.C., Shewry, M.C. & Tudor, G.J. (1998). *Land Cover Change: Scotland from the 1940s to the 1980s*. The Stationery Office, Edinburgh.
- Tivéus, Y. & Emborg, K. (editors) (1995). *Nordic Reflections*. Nordic Council of Ministers, Copenhagen.



## Appendix



### Convention on the Conservation of European Wildlife and Natural Habitats

#### Standing Committee

#### **Recommendation No. ... (2002) on conservation of birds in afforestation of lowland in Iceland**

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to the aims of the convention to conserve wild flora and fauna and their natural habitats;

Recognising the efforts of the government of Iceland to recover a part of the former forest cover of the island and welcoming the beneficial effects that afforestation will have for the biological diversity of the state and the control of erosion ;

Noting however that some of the afforestation projects may negatively affect areas of importance of bird species protected by Appendix II of the convention;

Noting that wetlands have become threatened ecosystems at the world level and that some of the areas likely to be affected by afforestation are wetlands or drained wetlands;

Wishing to avoid further loss of biological diversity and the disappearance of rare habitats in the European continent;

Recalling that the convention provides that Parties are to give particular emphasis in their conservation efforts to endangered species, especially endemic ones;

Wishing that the protection of areas of importance for birds be integrated in a perspective of sustainable development for the island that include forestry;

Conscious of the need to review present physical planning regulations so as to adapt them to a better protection and enhancement of the natural values of Iceland;

Referring to the expertise carried out by Professor Michael Usher [doc. T-PVS/Files (2002) 3] ;

Recommends that government of Iceland :

1. carry a global environmental impact assessment of afforestation policy so as to be able to evaluate how present and future afforestation of lowlands may globally affect habitats and species protected under the convention;
2. map, as a matter of urgency, areas of high biological value in Iceland so that such information may be used both for guidance to the planning process and to identify "Areas of Special Conservation Interest" referred to in Recommendation No. 16 (1989) of the Standing Committee;
3. support and encourage afforestation giving priority to areas known to have reduced biodiversity value, such as eroded areas or heavily used farmland, avoiding as much as possible areas of bird interest or partially drained wetlands which might be easily restored to their former condition;
4. introduce as a matter of urgency a system of statutory consultation between the Forest, Nature and Planning Agencies for new afforestation schemes up to 200 ha, promoting co-ordination and synergy among the different departments concerned; involve the local authorities and the civil societies in the

consultation process in the most appropriate manner; and establish in that framework an appeal mechanism to solve discrepancies;

5. consider establishing a networking of environmental data that would be suitable for Icelandic data providers and users;
6. draft and implement a National Strategy for biological diversity in Iceland; and
7. designate areas for inclusion in the Convention's Emerald Network of Areas of Special Conservation Interest.