

Conservation status and main pressures and threats on forest habitats in the Alpine and Continental biogeographical regions

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Forests in Natura 2000



- 50% of the network is forest
- Most widespread habitat group in network
- Annex I habitat types
- Other forest types as habitat for species (including birds)
- Some forests strictly protected, others managed commercially

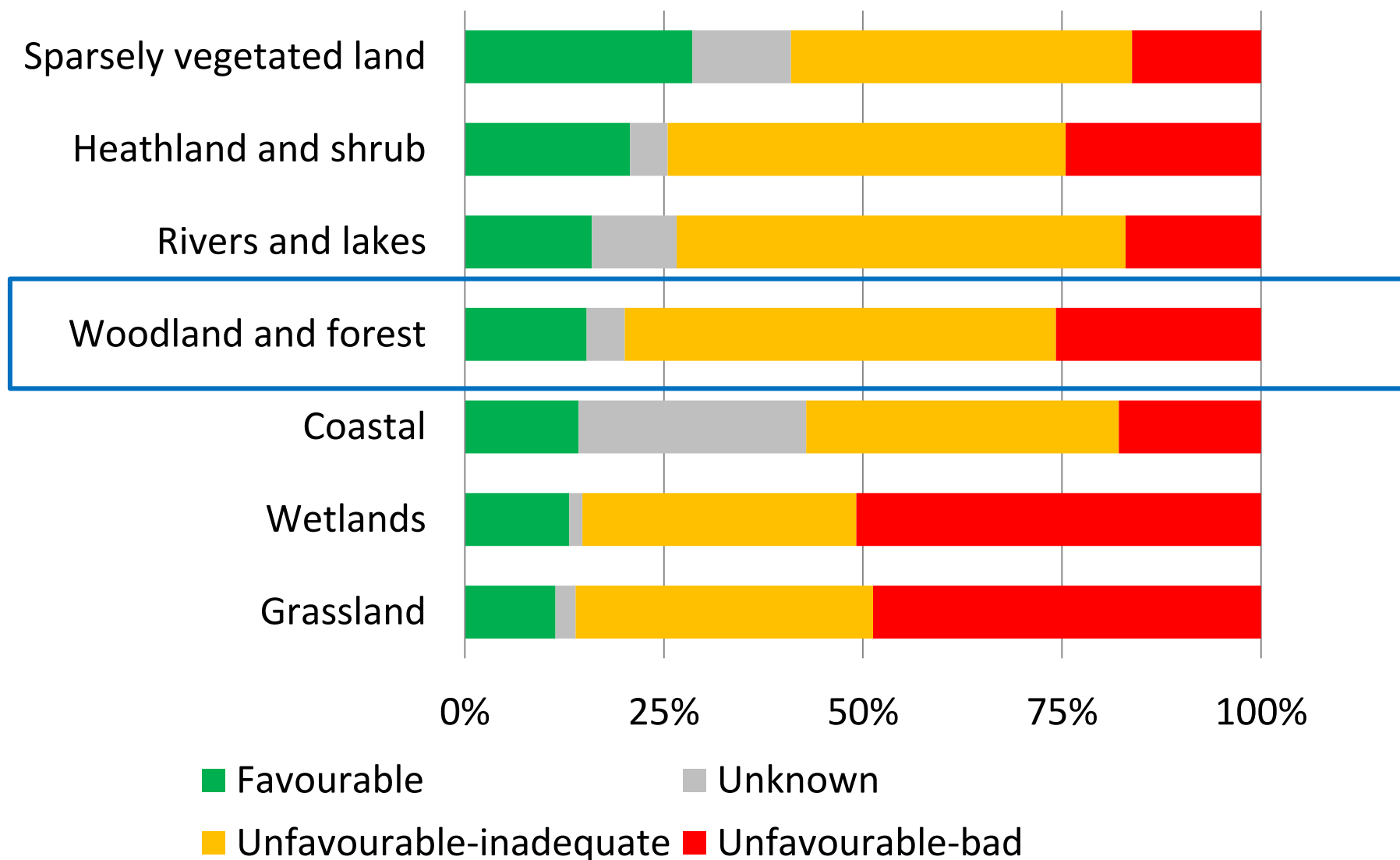


Most widespread Annex I forest types include several beech woods

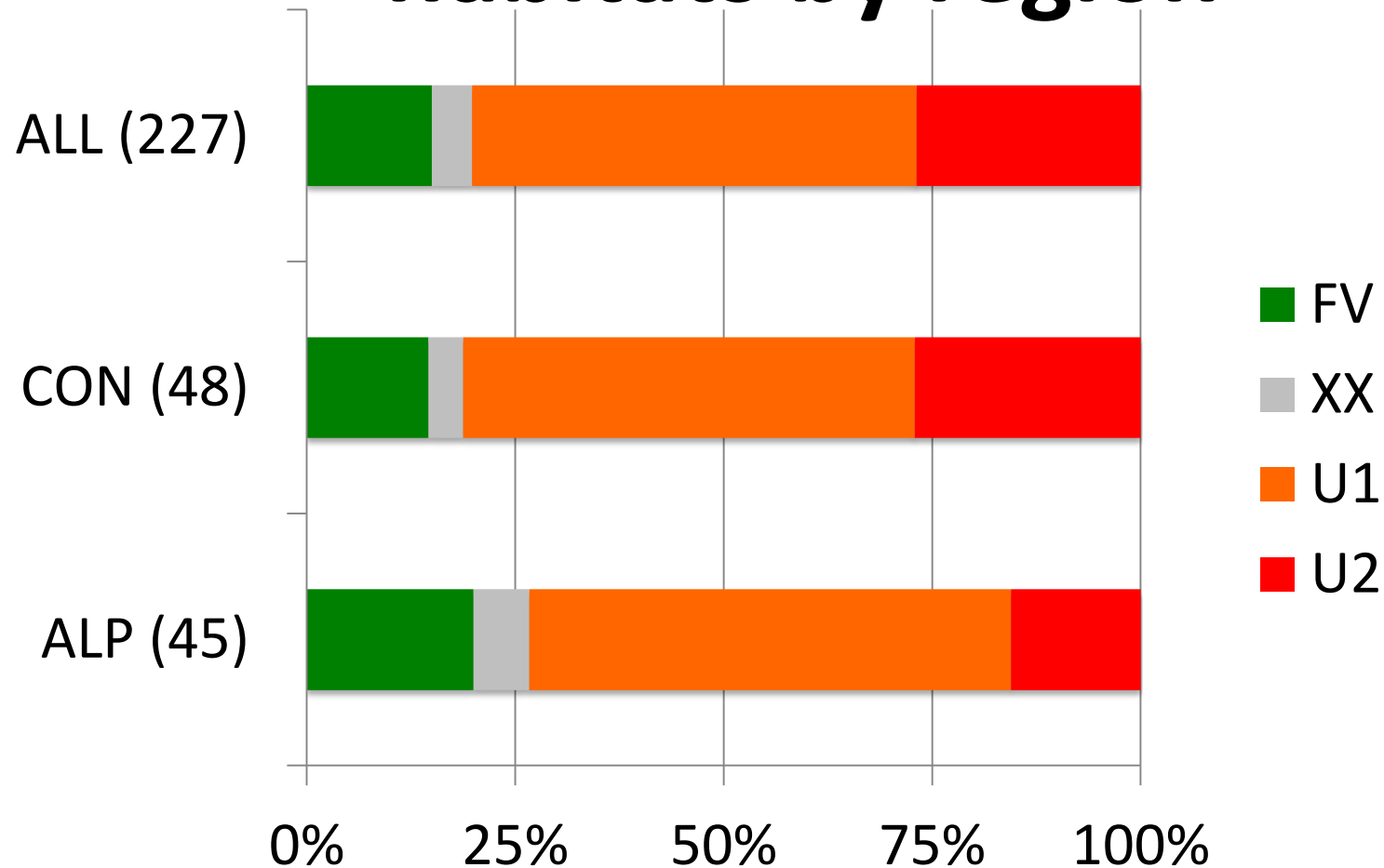
All regions	Alpine	Continental
9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)	9040 Nordic subalpine/subarctic forests with <i>Betula pubescens</i> ssp. <i>czerepanovii</i>	9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)
9230 Galicio-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i>	9410 Acidophilous <i>Picea</i> forests of the montane to alpine levels (<i>Vaccinio-Piceetea</i>)	9170 <i>Galio-Carpinetum</i> oak-hornbeam forests
91D0 Bog woodland	9130 <i>Asperulo-Fagetum</i> beech forests	9110 <i>Luzulo-Fagetum</i> beech forests
9340 <i>Quercus ilex</i> and <i>Quercus rotundifolia</i> forests	91V0 Dacian Beech forests (<i>Symphyto-Fagion</i>)	91M0 Pannonian-Balkan turkey oak –sessile oak forests
9010 Western Taïga	9110 <i>Luzulo-Fagetum</i> beech forests	9130 <i>Asperulo-Fagetum</i> beech forests



Conservation status of terrestrial habitats



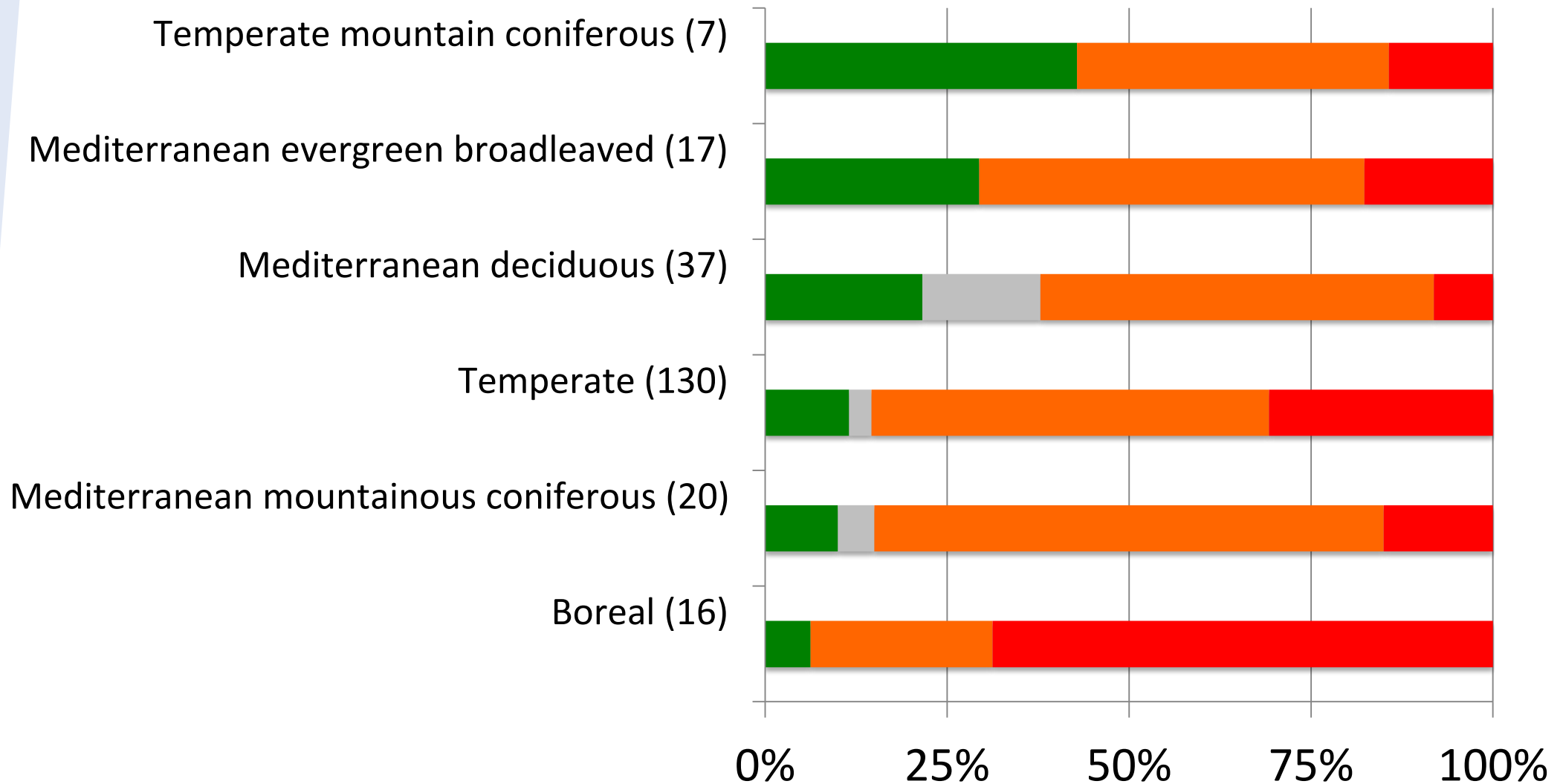
Conservation Status of forest habitats by region



Conservation Status 'better' in Alpine region than elsewhere



Conservation Status by forest type (all regions)



Unfavourable Conservation Status for forest habitats generally due to 'Structure & Functions' &/or 'Future Prospects'



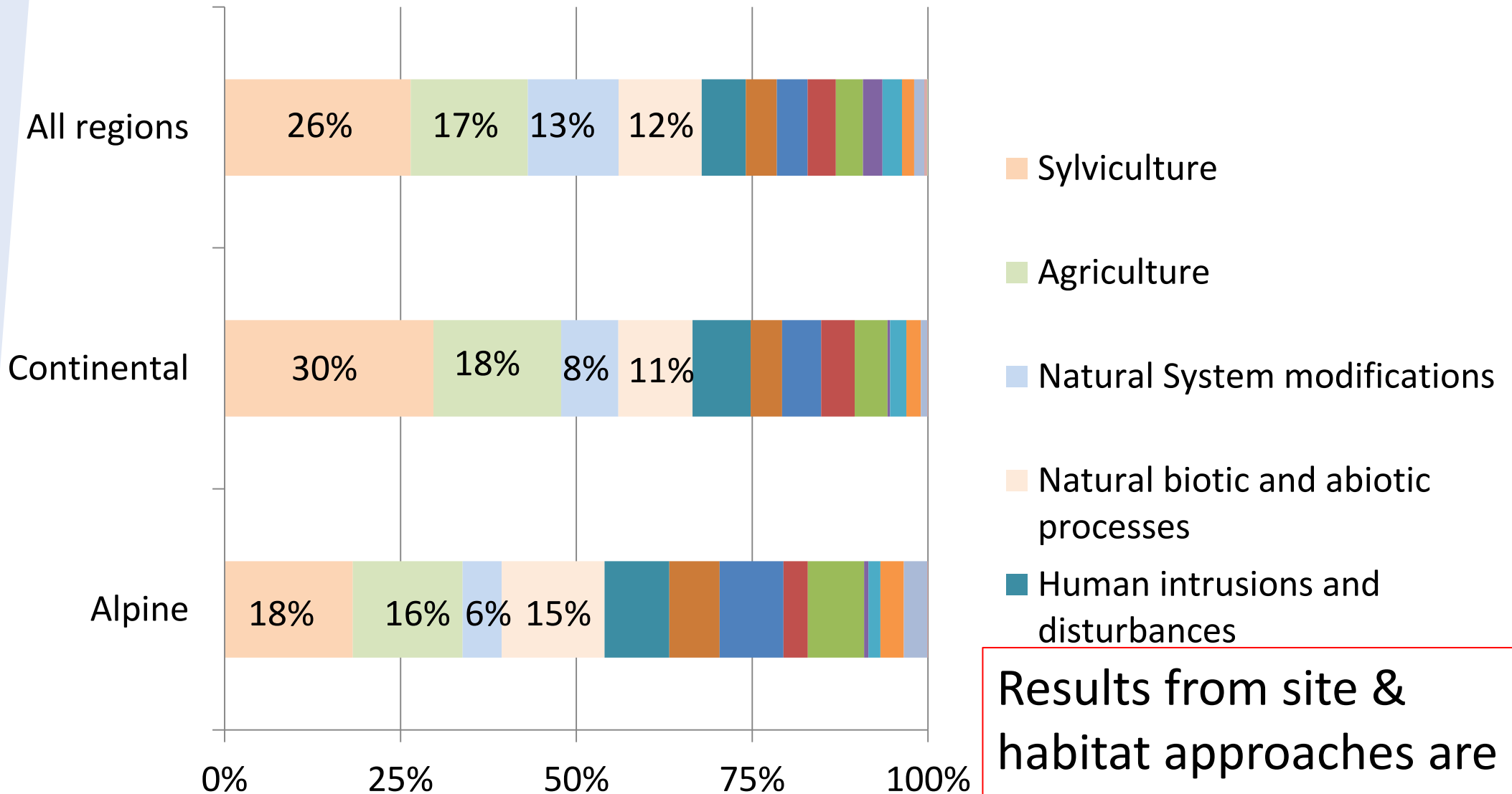
Most frequently reported pressures on forest habitats [Article 17 reports]

All regions	Continental	Alpine
Forest and Plantation management & use	Forest and plantation management & use	Forest and Plantation management & use
Changes in water bodies conditions	Changes in water bodies conditions	Changes in water bodies conditions
Vegetation succession/Biocenotic evolution	Vegetation succession/Biocenotic evolution	Sport and leisure infrastructures



Impacts on forest Natura 2000 sites

[from Standard Data Forms for sites >75% forest]



Results from site & habitat approaches are very similar



Reporting is at different levels so difficult to extract detail but similar patterns across regions

Source	Rank	Alpine	Continental	All regions
Sites (SDF)	1st	removal of dead and dying trees	removal of dead and dying trees	removal of dead and dying trees
	2nd	forestry clearance	forest replanting	forest replanting
	3rd	forest replanting	forestry clearance	forestry clearance
Habitats (Art 17)	1st	removal of dead and dying trees	removal of dead and dying trees	removal of dead and dying trees
	2nd	forestry clearance	forest replanting	forest replanting
	3rd	forest replanting	forestry clearance	forestry clearance

Again similar results



Agriculture frequently noted as a pressure/impact both for sites and habitats



reports at level 2 & 3 suggest this is mostly related to grazing



The Red List of European Habitats

- A DG Environment funded project assessing risk of ‘collapse’ for natural & semi-natural EUNIS level 3 habitats using modified IUCN criteria
- Report delivered in mid June, includes data sheets with information on distribution, pressures, etc.
- Relatively few forest habitats assessed as ‘threatened’

European Red List of Habitats - Forests Habitat Group

G1.6a Fagus woodland on non-acid soils

Summary

The habitat currently has an area of > 17000 km² (EUNIS = 30000 km²) EUNIS-47 in a wide range from the northern Mediterranean and Balkan to the southern tip of Northern Europe geographically and floristically distinct subtypes and is essentially a European habitat. It is a major part of the potential natural vegetation. It decreased in quantity (33%) during the moderately severe deterioration in quality in almost 1/3 of its area. Competing unaided quality non-acid beech forests with sufficient dead and dying trees and complete diverse reduced to small remnants (c. 1%). The historical decline was dramatic compared to the habitat vegetation but occurred in many countries well before 1750. Current trends in it offering a lot within Europe with a tendency to stable or slightly increasing in central and still clearly declining in some Mediterranean or Balkan countries. Significant pressures a (for example removal of dead and dying trees, planting of non-native or conifer trees, fragmentation, and tracts due to urbanisation and infrastructure, regularly also forest grazing and others.

Synthesis

The habitat is Near Threatened, because of a moderate qualitative decrease over almost area and an assumed slight decrease in quality over larger areas under criteria: C03 a pressures and threats being present. Because of large B03 and A03, and with only a 5% decrease all other criteria are assessed least concern. The assessment of historic trends due to data deficiencies. With a 100% and more consistent application of the listed quality territorial data will over 30% of the area would be at least slightly affected and the habitat may qualify for vulnerable under criterion C03. Therefore, we recommend repeating the more consistent data or bases of quality are available.

Overall Category & Criteria			
B1 B2	B1 B2a	B1 B2b	B1 B2c
Near Threatened	EN	Near Threatened	EN

Sub-habitat types that may require further examination

While at least some good examples of non-acid mountain beech forests still persist, the habitat neutral to base-rich beech forests is much more fragmented. Several of its subtypes have been affected to a slight to moderate decline over large areas of their native distribution. Besides the beech subtypes especially the humid subtypes are more often drainage and changes in the hydrological system or have been lost due to infrastructure.

Habitat type

Code and name

G1.6a Fagus woodland on non-acid soils.



G1.6a Fagus woodland on non-acid soils in the National Park Hainich, Germany (Photo: A. Stymark).

G1.6a Coppice form of beech forest with *Avenula nemoralis* and *Ornithoglossum* in the herb layer (Del et Hahn, Belgium (Photo: J. Jansen).

Habitat description

Within the climatic zone where *Fagus sylvatica* (including in south-eastern Europe esp. orientalis and sub-orientalis) can out-compete other broadleaved trees, this habitat comprises all those beech woodlands on more base-rich and neutral soils including both nutrient-poor rendzinas and more fertile brown earths. They extend from the Atlantic zone, in Great Britain, northern France and the Pyrenees, through the Continental zone into the Alpine region of central Europe, the Carpathians, and the Balkans. Beech is the supreme element in the canopy, which, on more productive soils, is often very high, the majestic trees creating a cathedral like effect. However, there are more associates here than on base-poor soils even though they are sometimes in a subordinate canopy form, with *Quercus petraea*, *Q. robur*, *Prunus avicolaris*, *Acer pseudoplatanus*, *A. platanoides* and *Alnus glutinosa*. *Castanea sativa* and *Tilia cordata* are more common in the warmer lowlands while more strongly thermophilous types in periodically dry situations have *Cistus alba*, *T. pyramidalis*, *Astragalus hippocastanum* and *Acer campestre*. To the Atlantic west, *Taxus baccata* is characteristic, though absent, where it becomes locally dominant, are included in G3.3a *Taxus* woodland. Towards higher altitudes, there can be some *Abies alba* and *Picea abies* but co-dominant canopies fall within the G3.1b and G3.1c mountain-*Abies* woodland. The shrub layer is typically sparse and the most common species throughout are *Crataegus monogyna*, *C. laevigata*, *Corylus avellana*, *Viburnum opulus*, *V. lantana*, *Cornus sanguinea*, *Prunus spinosa*, *Ligustrum vulgare*, *Rosa avensis* and *R. canina* agg., of which many are more typical of thermophilous oak woodland. *Senecio jacobina* increases towards the Atlantic, *Daphne laureola* and *Ruscus acropetalus* in the south and while *Stachys* beds in the continental zone occur with *Lonicera alpestris* and *L. nigra* in the Alps, Dinarides and Carpathians. The herb layer is here often species-rich with a predominance overall of shade-tolerant mesophytes, many of them shared with mixed broadleaved forests of the temperate zone (G2Aa *Carpinus* & *Quercus* mixed, *Asplenium adnigrum*; *Galium aparine*, *Milium effluum*, *Myrica maritima*, *Lamium galibardii*).

Main Pressures and Threats

- logging, deforestation
- plantation forestry
- inappropriate forestry management
- draining of wet forests
- forest grazing
- nutrient enrichment
- acidification
- dead wood removal
- natural succession in formerly traditionally managed forests (coppices, wood pastures)





For Article 17 reports see

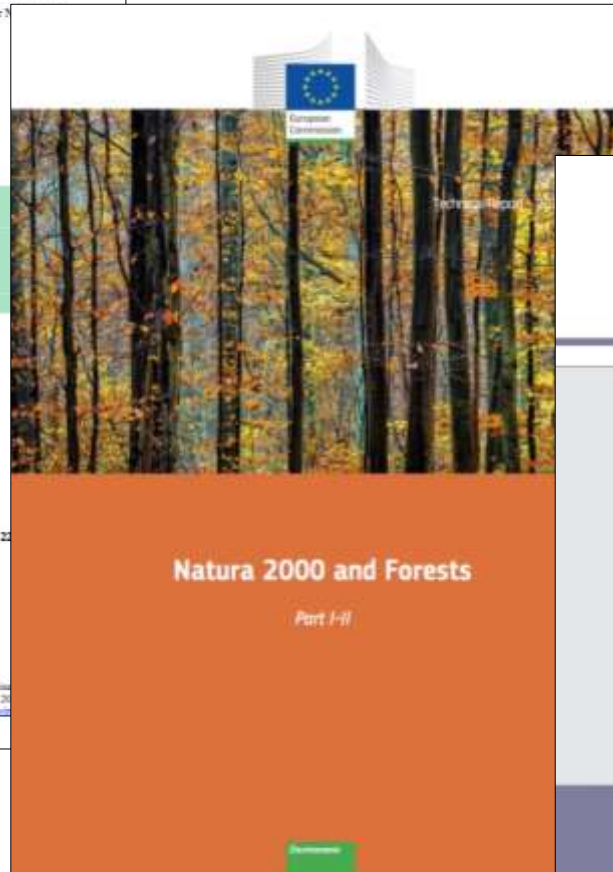
[http://bd.eionet.europa.eu/
article17/reports2012/](http://bd.eionet.europa.eu/article17/reports2012/)

Thank you



Further information

European Environment Agency
European Topic Centre on
Biological Diversity



Short topic assessment on Forests

and Article 17 related data.

Analysis of Articles 12 and 17 reporting data from
2007-2012 for woodland and forest ecosystems

Ben Delbaere, Celia García Feced and Sophie Condé

The European Topic Centre on Biological Diversity (ETC/BD) is a consortium of twelve organisations under a Framework Partnership Agreement with the European Environment Agency for the period 2010-2014. The ETC/BD is currently supported by the following organisations: ALTEGRA, ADP/CE, ECNE, Ecologic, ELSAS, SPRA, INEC, MNEN, SCNA, SIA, Streeklucht.

EEA Technical report | No 2/2015

State of nature in the EU

Results from reporting under the nature directives 2007-2012

EEA Report | No 5/2016

European forest ecosystems

State and trends

EEA | 1077-6448



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