

# Consulation response on EU Guidance on the management of wilderness and wild areas in Natura 2000

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## GUIDANCE BASIS FOR PROTECTION OF WILD LAND IN THE EU

I find it interesting that the Guidance states that Natura 2000 can provide a flexible framework in which re-wilding measures can be implemented in order to enable natural processes to dominate. It is flexible perhaps because the approach to Natura 2000 in terms of the protection regime for sites is vague and unclear in the national legislation of member countries.

There are 21 member countries that have single Acts of legislation that designate for their national protected areas as well as Natura 2000 sites, and 16 of those also incorporate the IUCN categories. Thirteen of those 21 member countries associate maintaining *"favourable (conservation) status"* with their Natura 2000 sites:

*Austria (all states), Belgium (both), Czech Republic, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Luxembourg, Netherlands, Slovakia.*

Eight member states refer to *"deterioration"*, the other measure associated with the status of Natura 2000 sites:

*Austria (5 states), Belgium (both), Denmark, Luxembourg, Netherlands, Romania, Slovenia, Spain*

This gives a total of 16 out of the 21 member countries that include Natura 2000 in their national protected area legislation, and which give one or both of the two main indicators from the Habitats Directive for their protection regime.

Part of the problem for the lack of clarity is that few countries recognise the Natura 2000 network as a classification system as such, instead indicating that Natura 2000 sites, if they are not instituted through contracts with landowners, may be included in any other category of protected area amongst the national protected area types, such that their protection regime would be that of the national protected area type.

The European Topic Centre on Nature Protection and Biodiversity analysed the degree of overlap between the designations in national protected area systems (as reported in the CDDA) with those reported for the Natura 2000 network of protected sites (1). The extent of overlap varies substantially between countries – from nearly 0% to 100%. Three of the more recent accession countries – Estonia, Latvia and Malta - have almost full coverage of their Natura 2000 areas with national designations. However, only seven countries have greater than 80% overlap, and with 11 countries not even achieving 50% overlap.

This low extent of overlap may be an indicator of the proportion of Natura 2000 sites instituted through landowner contracts compared to being designated under national protected area types. It thus may indicate variability in being able to achieve and enforce protective measures to the same extent as in national protected areas. The implications this has for wild land within the Natura 2000 system depends on whether it is covered by a national protected area type, and what protected area type/IUCN category it may be.

In our report for the Scottish Government, we identified IUCN Category I and II protected areas as being indicative of wilder land in Europe. That there is overlap between Natura 2000 sites and protected areas classified under Category I and II is given likelihood because of the coincidence of Natura 2000 sites for keystone species in Annex II with high WQI.

In light of the European Topic Centre data, we recently re-analysed the overlap between Natura 2000 sites and IUCN Category I a&b protected areas, using their respective spatial data sets and GIS. We calculated that there is 98.7% coverage of IUCN Category I by Natura 2000. The confidence level of this finding is however affected by a disparity between the total area of Category I as represented by the spatial data set of the CDDA of 37,289 km<sup>2</sup> compared to the 50,941km<sup>2</sup> from the tabular entries in the CDDA, suggesting that the spatial data set of the CDDA is incomplete. This was confirmed to some extent by the list of site boundaries by country provided for the CDDA, and which contains information on whether digital boundaries have been reported for a site reported as tabular data.

You may wish to consider how this affects the following figure in the Guidance:

*Fig. 1.1 Part of the Natura 2000 network protected under strict protection regime (IUCN protected areas categories Ia and Ib) (Sources: CDDA-database and Natura 2000 database).*

We took a second approach: the Natura 2000 database has an entry for each site giving the overlap with national designation types, and thus permits cross referencing with the tabular data of the CDDA. Three countries across the spectrum of overall coverage were used: the European Topic Centre data for Estonia shows almost 100% coverage; Bulgaria showed less than 20% overlap; and Romania was between the two at around 45%.

In our analysis for their Category I areas, both Estonia and Bulgaria showed 100% coverage with Natura 2000. For Romania, 41 Category I sites not buffered inside any other protected area are also covered by Natura 2000. The 13 Category I core areas of the National Parks (Category II) and the 8 Category I core areas of natural parks (Category V) are covered by Natura 2000. However, 14 of its 77 Category I sites were not overlapped by Natura 2000, representing 5.2% of the total area of Category I. Ten of those 14 sites that were not overlapped with Natura 2000 had no digital boundary in the CDDA. There were a total of 12 Category 1 sites missing from the digital boundary data, equivalent to 17,593ha, which is 5.6% of the total.

The overlap of Category II protected areas with Natura 2000 sites was also analysed for those three countries, and it was found to be 100% in each case, with also 100% overlap implying a fit between the boundaries of the national park and the Natura 2000 site.

A full review of the overlap of remaining countries will probably show up the need for the recording of the spatial data of the CDDA to catch up with that of the tabular data. However, on the evidence from Bulgaria, Estonia and Romania, it would seem reasonable to assume that it is the case for most of the 22 member countries that report Category I protected areas, that the wild land in their countries covered by Natura 2000 sites is also covered by national protected area types classified in Category I. It may also be the case for the 26 member countries that report Category II protected areas.

It could be argued therefore that the basis for the protection regime for wild land in the EU is not the Natura 2000 system, but instead the national protected area types that designate for Category I and II. The protection regimes for these protected area types are

frequently given in great detail in national protected area legislation, and especially so for protected areas that have strict protection.

The importance of the Natura 2000 system for wild land could be significant where there may be areas of primary habitat, or high wild land potential as shown by WQI mapping, which are covered by a Natura 2000 site that is not also a national protected area type. Until the CDDA spatial data is complete, it would be problematic to show the extent of this at present.

There is the circumstance where being a Natura 2000 site is considered to be a barrier for the protected area when there is an intention for the area being able to undergo restoration to greater wildness. Two of these were recipients of your Questionnaire: the Brandenburg sites in Germany, and the Oostvaardersplassen in the Netherlands.

In the case of the Brandenburg sites, they are covered with designations under the Brandenburg Conservation Act as nature reserves (NSG: ) Forst Zinna-Jüterbog-Keilberg, Reicherskreuzer Heide und Schwansee, Lieberoser Endmoräne, Pinnower Läuiche und Tauerische Eichen, and Heidehof – Golmberg. The legislation requires of each reserve the *“permanent protection and conservation”* of listed features. While there is some zoning possible in these reserves, and a range of prohibited and permitted activities, these reserves are required to be actively managed, and hence are classified as IUCN Category IV (You can fill in the missing entry in Table A5.1 with Category IV).

Since it is the intention for these ex-military areas to be restored to wilderness, then they will lose some of the listed features of the NSGs, such as heathland, and thus will not be in compliance with the Brandenburg Conservation Act. Nor will they be in compliance with the Habitats Directive since the listing in Section 3 of the regulation for each of these NSG in Brandenburg often ties features in the listing to that Directive – see, for instance the regulation for NSG Forst Zinna-Jüterbog-Keilberg (2).

It is the opinion of Christof Schenk of the Brandenburg Foundation that the feature listing in an NSG regulation could be changed, if it was not a priority habitat of the Natura 2000 system. However, he is less sure whether it could be changed when it is a priority habitat of the Natura 2000 system.

There is also the issue that the protected area legislation at mostly state and at federal level in Germany does not have a protected area type with the range of prohibitions and restrictions for strict protection through non-intervention. There are exceptions to this at state level, the *bannwald* in the legislation of Baden-Wuerttemberg, and the *totalreservat* in Saxony-Anhalt.

In relation to the loss of features, the Guidance suggests that compliance with the Habitats Directive could be achieved at the regional level, in which other protected sites can contribute to the favourable conservation status of the habitats and species concerned.

This a very interesting proposition, but I wonder how comfortable state or national nature agencies will be with this approach.

Certainly in the UK, there is pressure on EVERY Natura 2000 site to deliver on compliance with the features listed, because the implementation of the Natura 2000 network in the UK is based on the national system of Sites of Special Scientific Interest, all of which are evaluated under the criteria for listed features in Common Standards Monitoring. I guess it depends on how the evaluation is done in different countries, and in the particular case of the Brandenburg NSG whether reporting on favourable status it is at state or federal level.

A similar situation exists for the Oostvaardersplassen, which is designated a nature reserve under the Nature Conservation Act, and which is classified in IUCN Category IV (another for you to fill in for the missing entry in Table A5.1). It is this listing of features (conservation objectives) that occurs under the legislation for both actively managed nature reserves and Natura 2000 sites that creates the problem when dynamic processes towards a wilder state of nature ensue. I see no provision in the Nature Conservation Act for these conservation objectives to be changed. Whether the new law, currently in draft, will be different remains to be seen, and if it has a provision included for strict protection. Thus it again depends on whether the Dutch nature authorities evaluate the status of listed features on a reserve by reserve basis, or on a regional or national basis.

## INFLUENCE OF CARNIVORES AND HERBIVORES

The Guidance says that carnivores regulate the number of herbivores and therefore indirectly influence grazing pressure (pg. 35). This gives only one aspect of the influence of carnivores in trophic cascades. Carnivores can influence herbivore pressure through behavioural modification by their presence instilling fear and flight in their prey, and thus without actual predation. It is the difference between behaviourally mediated trophic cascades and density mediated trophic cascades. Behaviour modification is what gives rise to the spatially explicit regeneration of aspen in places like Yellowstone National Park after the reinstatement of the gray wolf (3).

Considering how much attention was given in Section 4 to herbivores and the threats to wild land from grazing, I was surprised to see in Section 5 in discussing re-wilding through restoration measures that the Guidance gives the example of seeking to restore lost natural processes, such as reintroducing grazing (pg. 80). It is repeated later when the Guidance says reintroduction of herbivores is a functional way to ensure that the components of a natural system are in place so that nature can regenerate and restore (pg 82).

These assertions are unqualified as to whether the grazing would be by native herbivores lost from the location, or by domesticated livestock. Nor was there any indication of whether this grazing would be as close to a natural herbivore pressure, as was considered in Section 4 in relation to the core zone of Oulanka National Park and the long term aim of the management to stabilise the grazing pressure of reindeer to as close to the natural situation as possible.

It should be noted that many strictly protected areas in national protected area legislation specifically prohibit grazing with livestock.

It could be argued that herbivore pressure will never be as close to the natural situation as possible without native carnivores also being present. While managers may vary the number of herbivores, they will be incapable of creating the spatial variation of herbivore pressure that is induced by the physical presence of carnivores.

This is a key consideration that is missing from initiatives that take a nature development approach with *free-ranging* domestic livestock, or domestic livestock as analogues of native herbivores.

There is also an issue for native carnivores with the presence of domestic livestock. The resurgence of brown bear in recent years in the Tatra mountains of Slovakia is directly attributable to the removal of cattle grazing from the upland grass. This is unlikely to be due to resource competition alone, and probably has a major element of the bear being better able to exhibit their natural behaviour within their natural range in the absence of livestock.

This has implications for the re-introduction of domestic livestock into abandoned areas that may already be seeing a repopulating with carnivores. It will create tensions that paradoxically are not just about the threats to the livestock, but the carnivores will get the blame.

Furthermore, a recent study in Spain raises the issue of traditional pasture practices, as alluded to in the Guidance in relation to the Gorce National Park in Poland (pg 83) and questions the motivation behind them (4).

The authors of the study assert that the conservation policies of the Natura 2000 network reflect an overarching concern about the alleged negative effects of abandonment of traditional uses. They say that in particular, the abandonment of livestock herding is widely assumed to be responsible for biodiversity decreases through habitat homogenization. However, they claim those negative effects are neither straightforward nor always supported by hard data.

Their study showed a negative relation ship between the rise in cattle numbers in the Cantabrian Mountains (NW Spain) over the past 20 years, and the occupancy of capercaillie leks (). They believe that concerns should be raised about the effects on ecosystems of high densities of free-ranging livestock.

Their conclusion is that while preserving traditional uses of the landscape and helping local human communities are legitimate policy options, they argue that such goals should not be disguised under the term of nature conservation. Instead, they should be named according to their main objective, e.g. preservation of cultural landscapes or economic activities.

## FINNISH WILDERNESS

Is debatable whether the resource protected areas (Category VI) of the Sami culture and its traditional subsistence use is an exemplar for wilderness areas (pg 75). As was pointed out in our report, they are not regarded as protected areas in terms of the national protection area system of Finland, since they are not designated under the Nature Conservation Act. Moreover, there are strictly protected areas designated under the Nature Conservation Act within these Sami reserves. Thus the Paistunturin Wilderness Area (157,100ha, Category VI) encompasses the Kevo Strict Nature Reserve (71,274ha, Category Ia) and the Kaldoaivin Wilderness Area (294,535ha, Category VI) encompasses the Sammuttjängän-Vaijoenjängän Protected Mire (52,829ha, Category Ib).

An analogy for this situation would be the National Forests in America, which are carefully managed for a range of purpose. The National Forests are classified in Category VI, and inside which there are Wilderness Areas of the National Wilderness Preservation System, which are classified in Category Ib.

The methods of forestry used by the NFS in America and other uses of the forests are such that they act as a buffering zone for the wilderness areas. The Sami Wilderness Areas could be viewed in the same way.

## ANNEX A3 - LEGISLATION AND PROTECTION PROVISIONS IN EU MEMBER STATES

### BELGIUM – integral nature reserve

The Law on the Conservation of Nature (MB 09.11.1973) of Wallonia identifies two types of nature reserve: integral nature reserve (Art 7) and directed nature reserve (*dirigée*, Art. 8). An integral nature reserve is recognisable in the legislation of a number of countries in Europe as being a strict nature reserve. Article 7 says that an integral nature reserve is a “*protected area created in order to let the natural phenomena evolve according to their laws*”. A list of restrictions applying to the nature reserves is given in Article 11, and I suspect you apply them with the rigor needed for non-intervention for an integral reserve, and for where they may apply in the active management of the directed nature reserve.

No Category I nature reserves are reported for Belgium in the CDDA. There is however, about 1,000ha of protected, non-intervention forest reported to FOREST EUROPE (Ministerial Conference on the Protection of Forests in Europe) and this may receive its protection under Article 7, since the legislation also covers forests.

### BULGARIA - reserve

The Article on protected area types in the Bulgarian Law for the Protected Territories 1998 does not translate to strict nature reserve, just reserve (*Rezervat*). The detail of the protected area type is however consistent with a strict nature reserve. This legislation distinguishes between its nature reserves on a similar basis as the Belgium legislation, since the other type is a managed or maintained reserve (*Poddurzhani rezervat*)

In looking only for a protected area type of Strict Nature Reserve, you have missed:

### ROMANIA – scientific reserve

Article 5 of the Law on protected natural areas, conservation of natural habitats, flora and wildlife, 2007, has scientific reserves (*rezervatii stiintifice*) and nature reserves (*rezervatii naturale*). The purpose and scheme management categories of protected areas are given in Annex 1 of the law. A scientific reserve is a strict reserve “*to protect habitats that are kept in an undisturbed state as possible*”

### SLOVAKIA – nature reserve

The law on Nature Conservation and Landscape, 2002, has five levels of protection. The extent of restrictions increases through each level, such that there is an increased level of protection. Nature reserve (*Prírodná rezervácia*) has the fifth level of protection (Art.22) whereas Protected area (*Chránený areál*) has the fourth level of protection (Art.21)

### GREECE - absolute nature protection area

Article 4.3 of the law on Conservation of biodiversity and other provisions, 2011, specifies Areas of absolute nature protection (Περιοχές απόλυτης προστασίας της φύσης) which is a strict nature reserve (Art.5.1 ) and Areas of nature conservation that are managed nature reserves (Περιοχές προστασίας της φύσης )(Art.5.2).

FRANCE – integral nature reserve,

Integral nature reserves are strictly protected core zones in national parks – Article L331-16 of the Environment Code

Two types of state-owned Forest Biological Reserve – strictly protected (*réserve biologique domaniale intégrale*) and managed (*réserve biologique domaniale dirigée*): Articles L.\* 133-1 and R. 133-5 in the Forest Code.

## ANNEX A8 - BEST PRACTICE EXAMPLES OF WILDERNESS MANAGEMENT

In the two shorter examples of best practice wilderness management in Natura 2000 sites in the Alpine region, the core wilderness areas are shown to be certified by PAN parks. There are strict national protected areas within both Majella and the Central Balkan National Parks, indicating that there is a national protection regime in place as well for the wilderness core areas.

Majella has Riserva Naturale Valle Dell' Orfento State Nature Reserve, a state forest reserve that is classified in IUCN Category Ia. It is designated under Article 17 and the principles embodied in Article 11 of the Framework law on protected areas, 1991 n. 394

The Central Balkan National Parks has nine, spatially separated IUCN category Ib reserve areas within it. Hence why the wilderness is fragmented. However, the management plan specifies human impact limitation zones as buffer zones around the reserve areas as a means to reduce the effects of fragmentation. The range of restrictions of activity in these buffer zones prevents or mitigates unfavorable anthropogenic effects on the reserve areas, and allows the undisturbed passage of wild animals between the individual reserve areas.

### References

(1) Percentage of Natura 2000 site area not protected under national instruments per EU Member State, European Environment Agency March 2010

<http://www.eea.europa.eu/data-and-maps/figures/percentage-of-natura-2000-site-area-not-protected-under-national-instruments-per-eu-member-state>

(2) Verordnung über das Naturschutzgebiet „Forst Zinna-Jüterbog-Keilberg“ (GVBl.II/99, [Nr. 33], S.664)

[http://www.bravors.brandenburg.de/sixcms/detail.php?gsid=land\\_bb\\_bravors\\_01.c.15654.de](http://www.bravors.brandenburg.de/sixcms/detail.php?gsid=land_bb_bravors_01.c.15654.de)

(3) Trophic Cascades Program, Oregon State University

<http://www.cof.orst.edu/cascades/index.php>

(4) Blanco-Fontao et al (2010) Abandonment of traditional uses in mountain areas: typological thinking versus hard data in the Cantabrian Mountains (NW Spain). *Biodiversity and Conservation* 20:1133–1140