Methodology of the Carpathian Forest Habitats "Red List"

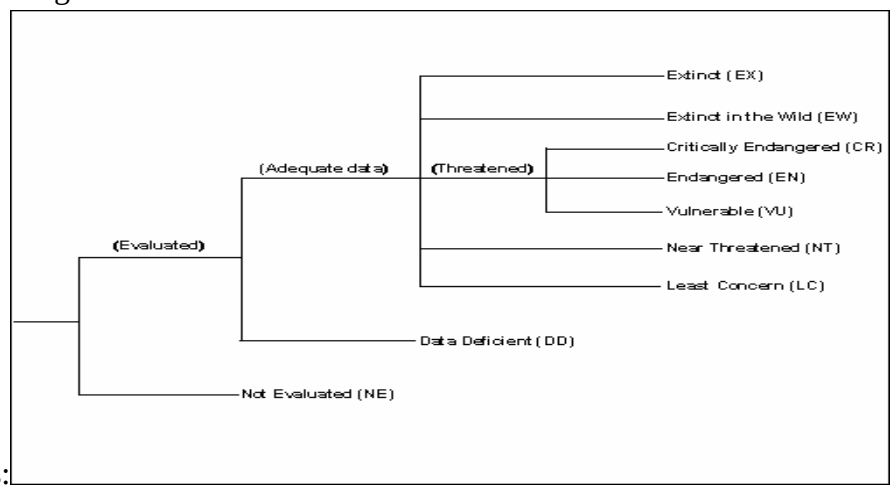
Issues:

IUCN Criteria for red list:

The criteria can be applied to any taxonomic unit at or below the species level.

What about habitats?

IUCN Categories for species:



Natura 2000 categories

Habitat of EU importance
Priority habitat

Some examples of Habitat Red Lists :

The Norwegian Red List of on Habitats (Kjaerstad, 2011)

Four types of criteria:

1. Areal reduction
2. Few localities and decreasing area
3. Few localities
4. Decreasing habitat Quality

Threat criteria and categories in the German Red List of Threatened Habitats

(http://www.bfn.de/0322_biotope_kat+M52087573ab0.html)

The threat assessment for habitat types is based on a two-stage criteria system that first takes in **Area Loss** (FL) as a measure of direct destruction and **Quality Loss** (QU) as a measure of gradual degradation. These two criteria are combined to determine a **Regional Threat** value (rG) for each of Germany's eight physiographic regions. The Regional Threat ranking is equal to whichever is the higher of the Area Loss and Quality Loss ranking. The average of the Regional Threat rankings gives the nationwide threat status for a habitat type.

Current trends in habitat numbers can deviate from historical trends, which are determined using the same Red List criteria and categories for threat assessment based on an analysis of trends over the past 50 to 150 years. Assessing the **current trend** based on developments over the last 10 years allows a prognosis to be made for the near future (up to a maximum of another 10 years). Consideration must, however, be given to the fact that short-term changes in extraneous conditions (e. g. changes in EU farming subsidies), and longer-term events whose impacts are not yet sufficiently known, can lead to a more negative outcome than the prognosis indicates. Conversely, it is also possible that in certain areas, nature conservation efforts and legal requirements (such as the Habitats Directive and the Water Framework Directive) will affect a more positive trend.

The threat status and current trend projection are supplemented with an assessment of the regenerability of each habitat type. Regenerability is an important facet of habitat 'sensitivity' and provides a way of prioritising conservation effort between habitats of the same threat ranking. This information is also useful for assessing the potential for mitigating impacts of human activities on the natural environment.

Area Loss (FL) and Regional Threat (rG)

0 Destroyed
1 Critically Endangered
2 Endangered
3 Vulnerable
R Rare (geographically restricted)
V Near threatened
* Least concern (Currently not threatened)
# Threat ranking not meaningful
? Data deficient/ranking not possible

Quality Loss (QU)

0 Destroyed
1 Critically Endangered
2 Endangered
3 Vulnerable
* Least concern (Currently not threatened)
? Data deficient/ranking not possible

Current trends

– Trend negative
+/- Trend largely stable
+ Trend positive
? Trend cannot be determined

Regenerability (RE)

N Not regenerable
K Minimal regenerability (> 150 years)
S Very limited regenerability (c 15-150 years)
B Limited regenerability (up to 15 years)
X Ranking not meaningful

Questionnaires on forest data availability results:

GIS/Database data:

Potential vegetation:

Country	CZ	SK	H	PL	UA	RO	SRB
Map GIS	yes	yes	no	?	?	no	?
Database	no	no	no	?	?	no	?

National classification:

Country	CZ	SK	H	PL	UA	RO	SRB
Map GIS	yes	yes	yes	?	?	no	?
Database	no	yes	yes	?	?	no	?

Natura 2000 habitats:

Country	CZ	SK	H	PL	UA	RO	SRB
Map GIS	yes	/.	yes	yes	?	no	?
Database	yes	no	yes	yes	?	no	?

European Forest Types:

Country	CZ	SK	H	PL	UA	RO	SRB
Map GIS	?	yes	?	?	?	no	?
Database	?	yes	?	?	?	no	?

Existing central database on forests in the country:

Country	CZ	SK	H	PL	UA	RO	SRB
Map GIS	/. yes	yes	no	No ?	?	no	?
Database	/. yes	yes	no	No ?	?	no	?

Carpathian Biodiversity Information System manages information on distribution of:
— All Carpathian Habitats (represented by Alliances)
— Endemic and Natura 2000 AnnexII Carpathian Plant Species
— Endemic and Natura 2000 AnnexII Carpathian Animal Species
in 309 Orographical Units of the Carpathians.

CBIS is devided into Two Sections:
— The Eastern Carpathians
— The Western Carpathians

Summary of issues:

No relevant data to use IUCN criteria for any habitats, there is need to develop special criteria for habitats (also no forest habitats)

But there are known approaches in Germany and Norwegian, they develop similar criteria for red list of habitats.

No exact data for all Carpathian Countries are available for distribution of forest habitat.

No exact data about trends in the time for distribution.

There are only information from previous projects for distribution of alliances in orografical units and their affinity to Land Corinne units.

Natura 2000 distinguished 3 categories for habitats:

1. No interest
2. EU interest
3. Priority interest

We can precise this for the Carpathians on Carpathian level.

Proposed Methodical Approach for Carpathians:

Follow the German and Norwegian Approach.

We will need more data as are possible in the ceri database

National experts for forest habitats should estimate or if possible evaluate all relevant data to get information about:

- Current area distribution of alliances in orographic units
- Potential area distribution of alliances in orographic units especially for forest alliances.
- Current status and trends (former and future) of alliances in orographic units. (the status means for example: proportion of the best conserved areas according to the alliance type in orographic units, or FSC status A for habitats, or in forest habitats the areas with well-preserved primeval forest, to the whole area of the assessed habitat)
- Evaluating of renerability of alliances by the experts

National experts then will develop the criteria for “habitat red list” to classify all the alliances into the IUCN categories, like for the species.

0.step

Experts will modify, precise proposed methodology, define the groups of the ororografic units, criteria etc.

1. Step

The next proposed questionnaire should collect the data for orographic units or group of them in the Carpathian countries:

Orographic unit or group of the units: ????				Country: ???						
Alliance	Potential	Current	Status A	Area loss	Quality loss	Current trends	Regener-ability	Endemism	Expert Name	Category IUCN
	Estimated area in hectares			**Estimated evaluation by the national expert**						
x x										
a a										
c c										

Codes:

Area Loss and Regional Threat

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Quality Loss

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Endemic in the Carpathians

Y- yes
N- no

Proposed IUCN Category in the orographic unit

CRITICALLY ENDANGERED (CR)
ENDANGERED (EN)
VULNERABLE (VU)
NEAR THREATENED (NT)
LEAST CONCERN (LC)
DATA DEFICIENT (DD)
NOT EVALUATED (NE)

2. step

After that the experts SCS (Daphne) and NFC (Forest habitats) will prepare the draft of the Carpathian Habitat Red List and send to PP to comment on it.

3.Step

Carpathian Habitat Red List for public discussion