

IUCN Conservation Outlook Assessment 2014 **(archived)**

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Please note: this is an archived Conservation Outlook Assessment for Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe. To access the most up-to-date Conservation Outlook Assessment for this site, please visit <https://www.worldheritageoutlook.iucn.org>.

# **Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe**

## **SITE INFORMATION**

Country:

Albania, Austria, Belgium, Bulgaria, Croatia, Germany, Italy, Romania, Slovakia, Slovenia, Spain, Ukraine

Inscribed in: 2007

Criteria:

(ix)

Site description:

This transboundary property stretches over 12 countries. Since the end of the last Ice Age, European Beech spread from a few isolated refuge areas in the Alps, Carpathians, Dinarides, Mediterranean and Pyrenees over a short period of a few thousand years in a process that is still ongoing. The successful expansion across a whole continent is related to the tree's adaptability and tolerance of different climatic, geographical and physical conditions. © UNESCO

## **SUMMARY**

### **2014 Conservation Outlook**

#### **Good with some concerns**

This is a serial transboundary site comprised of 15 components located in three countries – Germany, Slovakia and Ukraine. While the values of the site have so far been relatively well preserved, the external pressures are high and increasing and the small size and isolation of the components do not necessarily guarantee the integrity of the property in the long term and preservation of ongoing natural processes which are the essential part of the site's Outstanding Universal Value. The components of the site are influenced by the increasing development pressures, of which the forest resource exploitation in the Poloniny Natural park in Slovakia is of particular concern. Some progress has been achieved in improving trilateral cooperation with the establishment of a Joint Management Committee. However, the efficiency of the Joint management structure is still to be demonstrated.

### **Current state and trend of VALUES**

#### **Low Concern**

#### **Trend: Stable**

World heritage values are maintained for the time being. The primeval forests are well protected and have been so for many years. The component sites of the property benefit from a high level of protection; however they are influenced by the increasing development pressure, especially forest resource exploitation in the Poloniny Natural park, Slovakia. The German components of the property appear under no significant threat, except that their small size might present challenges to maintain their integrity in the future (SOC report, 2014).

### **Overall THREATS**

#### **Low Threat**

Current threats are relatively limited and mostly located in the Slovakian part of

the property. However, the pressures on the site are increasing and the size of the site's components is probably insufficient to really guarantee the integrity of the site in the long term, as well as preserve the natural processes that are an essential part of the site's OUV. In the Slovakian part of the property, logging occurs in the buffer zones and in the immediate vicinity of the property. The site is also under external pressures from socioeconomic development outside of but nearby the component protected areas (considered construction of new road infrastructures and tourism facilities) and from the various uses in the buffer zone. Other threats include wildlife management and unbalanced populations of mammals with some consequences on the natural forest regeneration.

## **Overall PROTECTION and MANAGEMENT**

### **Some Concern**

All component areas have a high legal protection status. However, there are some concerns about the consistency of the legal regimes of the property as a whole, and specifically within the Slovakian part of it. Some progress has also been achieved in improving trilateral cooperation with the establishment of a Joint Management Committee (SOC report, 2014). However, the efficiency of the Joint management structure is still to be demonstrated. The overall management plan of the Poloniny NP, in which all clusters from Slovakia are located, remains of concern. However, upon pressure from the Council of Europe that awarded the Poloniny park with the European diploma, the Ministry of environment of the Slovak Republic, with support from the Ministry of land use and rural development has engaged in a consultative process to implement a set of measures seeking to improve the quality of the management of the Poloniny NP.

# FULL ASSESSMENT

## Description of values

### Values

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#### World Heritage values

##### ► Evolution of central European natural ecosystems

###### Criterion:(ix)

The Primeval Beech Forests of the Carpathians and the Ancient Beech Forests of Germany represent an outstanding example of undisturbed, complex temperate forests and exhibit the most complete and comprehensive ecological patterns and processes of pure stands of European beech across a variety of environmental conditions. They contain an invaluable genetic reservoir of beech and many species associated and dependent on these forest habitats.

The Ancient Beech Forests of Germany represent examples of on-going post-glacial biological and ecological evolution of terrestrial ecosystems and are indispensable to understanding the spread of the beech (*Fagus sylvatica*) in the Northern Hemisphere across a variety of environments. The site is indispensable to understanding the history and evolution of the genus *Fagus*, which, given its wide distribution in the Northern Hemisphere and its ecological importance, is globally significant. These undisturbed, complex temperate forests exhibit the most complete and comprehensive ecological patterns and processes of pure stands of European beech across a variety of environmental conditions and represent all altitudinal zones from seashore up to the forest line in the mountains (SoOUV, 2012).

The property represents all stages of beech forests in their entirety, contains the largest remaining primeval beech forests in Europe, the largest and tallest beech specimens in the world, and all the necessary elements essential for the long-term conservation of the various beech forest types

and their associated ecological processes. (IUCN Evaluation Report, 2007).

### ► **Undisturbed complex temperate forest**

#### **Criterion:(ix)**

The nominated sites are true “virgin”, primeval forests that are original in structure, have developed under natural conditions, and have never been subject to use or management (except for protective conservation measures). The evidence is not only visual (no cut stumps, soil disturbance, etc.) but biogeochemical (i.e. the carbon/ nitrogen ratio is markedly lower (10 times) than that found in natural, but disturbed, beech forests). (IUCN Evaluation Report, 2007)

## **Other important biodiversity values**

### ► **Forest flora and fauna**

The site displays an important diversity of flora and fauna. This includes all major plant and animal species normally found in higher-elevation European forests of all tree species, especially those that are rare or dependent on virgin, undisturbed forests, such as black stork. Larger and more well-known species considered rare and unique (brown bear, bison, wolf, wildcat, lynx, elk, etc.) also occupy the area. The area contains more than 1,067 vascular plant species, 80 of which are red-data-book listed (IUCN Evaluation Report, 2007).

### ► **Genetic reservoir**

The site contains an invaluable genetic reservoir of beech and many species associated and dependent on these forest habitats, and a variety of other European forest flora and fauna found here but not restricted to these specific habitats. This includes all major plant and animal species normally found in higher elevation European forests of all tree species, especially those that are rare or dependent on virgin, undisturbed forests, such as black stork.

(IUCN Evaluation Report, 2007)

## Assessment information

### Threats

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#### Current Threats

##### Low Threat

Current threats are relatively limited, but the size of the components is probably insufficient to really guarantee the integrity of the site. Logging in the buffer zones and reportedly also within the components in the Slovakian part of the property; external pressure from development outside of the property and from the uses in the buffer zone; wildlife management and unbalanced populations of mammals with some consequences on the natural forests regeneration are the major threats to the site's integrity and Outstanding Universal Value.

##### ► Other

###### High Threat

###### Inside site

###### Outside site

Insufficient size to guarantee natural ecosystem developments  
(R7, R10, PI)

Most of the components are relatively small, and are often isolated within largely exploited zones. The natural processes require much larger areas to guaranty the naturalness.

##### ► Commercial hunting

###### Low Threat

###### Inside site

###### Outside site

Problem of natural regeneration exists in the German components (excessive browsing) (R9, PI). Development of introduced species like *Dama dama* for hunting purpose, linked to the absence of large predators (at least in the

German components) has led to a misbalance and a severe impact on natural beech regeneration. The large mammal's fauna has been largely modified with the elimination or strong reduction of predators and the introduction of game species.

### ► **Erosion and Siltation/ Deposition**

**Very Low Threat**

**Inside site**

The natural coastal erosion is a limited threat for the Jasmund NP component.  
(PI)

## **Potential Threats**

### **High Threat**

There are some potential threats linked to the need of local population for development (unsustainable tourism development and logging). The most serious threat comes from the global changes with modification of natural processes and change in altitudinal range of natural communities.

### ► **Logging/ Wood Harvesting**

**High Threat**

**Inside site**

**Outside site**

Illegal logging is mentioned but not proven (R 7); high timber demand exists (SK, UKr) and important logging activities occur around the component (buffer zones - R 6, R11). This represents a threat mainly for buffer zones but has an influence on the natural processes in general. Because local forest use in buffer zones presently occurs with cutting for subsistence needs, it is assumed this practice will continue. Forestry is important to local people but is managed by State Forest agencies (R1 - UKR&SK). According to the information included in the report received from the Council of Europe, the forest management plans of the forest reserves which form the Slovakian part of the World Heritage property provide for logging in those areas. The expert mission of the Council of Europe concluded that 93% of the Park is under serious pressure from unsustainable logging, as well as hunting and poaching (SOC Report, 2013).

► **Tourism/ visitors/ recreation**

**Low Threat**

**Inside site**

**Outside site**

Potential development of ski resort in Ukraine (R6).

Some tourism is present but numbers are small (R1 - UKR&SK)

Number of tourist is very high in some of the German components but it is well under control.

► **Commercial/ Industrial Areas**

**High Threat**

**Inside site**

**Outside site**

Several infrastructure projects (e.g. an antenna, roads and mass tourism infrastructures) are planned in the immediate surroundings of the Slovakian components of the World Heritage site (SOC report, 2013). Their potential impact on the OUV of the site is unknown.

► **Temperature changes**

**Low Threat**

**Inside site**

**Outside site**

Some forests at lower or higher elevation margins may change species composition as climate change occurs. One aspect of these properties' value is the ability of the beech to adapt to so many different ecological regimes (and in a number of different and varying forest associations) throughout its range. (IUCN Evaluation Report, 2007).

## **Protection and management**

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### **Assessing Protection and Management**

► **Relationships with local people**

**Some Concern**



Populations in the regions are rural and unemployment is high. Out-migration appears to be prevalent as people seek jobs elsewhere. Because local forest use in buffer zones presently occurs with cutting for subsistence needs, it is assumed this practice will continue. Forestry is important to local people. Lack of consultation with local people might be a problem in some areas (R1 – UKR & SK; R8).

Various programmes and initiatives are in place to ensure local community engagement. The protected area management entities also have advisory boards or communal national park boards composed of interest group representatives, elected officials (mayors), district administrators, ministerial representatives, and park staff to help reconcile the interests of local stakeholders and citizens. (R2)

## ► **Legal framework and enforcement**

### **Mostly Effective**

The Primeval Beech Forests of the Carpathians and the Ancient Beech Forests of Germany is a serial property comprising 15 components.

The legal framework for the components themselves is adequate.

UKR & SK: The component areas in the Ukraine are all part of the Carpathian Biosphere Reserve, the Uzhanskiy National Park, or the trilateral (with Poland and Slovakia) East Carpathians Biosphere Reserve. They have had protection in some instances for over 100 years with increasing protection from legislation and national decrees since the 1920's. The situation is similar in the Slovakia with the component areas being part of either Poliny National Park or protected landscapes (Vihorlat Protected Landscape Area).

In terms of their legal status and management regime all the sites are equivalent to IUCN Category I or II protected areas. The surrounding buffer zones (considered as part of the joint Management Plan) are a mixture of Category I, II and VI protected areas. There have also been efforts to establish ecological “connecting corridors” that are all within protected forests or existing national parks, biosphere reserves or other protected areas, with a minimum level of protection equivalent to IUCN Category VI protected areas. There are ongoing efforts to further protect these connecting corridors in the Ukraine (through national park designation).

The five components in the German part of the property are subject to

national law and are also governed by the Bundesländer that make up the Federal Republic of Germany. Both governmental entities share responsibility for nature conservation protection. The component parts are protected by the Federal Nature Conservation Act (2002, amended 2008) that specifically incorporates by reference the World Heritage Convention. The Grumsin component is also a Biosphere Reserve. (R2)

However, there are some concerns regarding the enforcement and consistency of protection regime of different components.

### ► **Integration into regional and national planning systems**

#### **Mostly Effective**

All components are also protected under other designations and a part of regional networks.

### ► **Management system**

#### **Some Concern**

Germany: All component parts have existing individual management plans developed in accordance with law and policy that meet national park (or biosphere reserve) goals for both management and monitoring. Plans incorporate monitoring of environmental parameters, visitor use impacts, and other resource issues such as managed control of wildlife impacts. Park management, biosphere maintenance and development plans are directly binding for existing programs and protection goals. In addition, there are management and spatial plans by the Bundesländer for regional spatial development, State Development Plans, Landscape Framework Plans, and so on, that incorporate park and biosphere reserve protection values and goals. (R2)

Slovakia & Ukraine: The Slovak State Nature Conservancy, Polininy National Park, Uzhanskiy National Park and the Carpathians Biosphere Reserve now provide management and staff for the component areas of the World Heritage site. The Carpathian Biosphere Reserve has 310 staff, Uzhanskiy National Park

has 110 staff, and Polininy National Park and the protected landscapes have 24 professional staff (including 8 rangers) between them and are supported

by volunteer “nature guards”. Staff is supported by State Nature Conservancy officials of both countries and coordinates management of buffer zones, where necessary, with local forestry officials as outlined in the Integrated Management Plan (R1)

The existing Joint Management Plan between Slovakia and Ukraine has been proposed for expansion to include the Federal Republic of Germany in an “Integrated Management System” that outlines the mechanism for trilateral cooperation between the three countries. The existing Joint Management Plan is comprehensive and could serve as a model because so many levels of government, management agencies, communities and interest groups are included. The agreement has not yet been fully realized due to changing political conditions and the fact that it has been in effect only for a few years, but there is continued cooperation on the ground at the committee levels. (R2)

#### ► **Management effectiveness**

##### **Data Deficient**

Efficiency of the Joint management structure needs to be demonstrated. Germany: All five components have well-established, qualified and experienced professional and technical staff in place. (R2)

#### ► **Implementation of Committee decisions and recommendations**

##### **Data Deficient**

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#### ► **Boundaries**

##### **Some Concern**

Boundaries are adequate (R1, R2), but components are sometime considered as too small (R2, R7). Despite the protection status of the buffer zones, they do not always fulfill this function. The ecological corridors could be further expanded.

GER: Boundaries of the nominated components have been designated with a view to ensuring retention of values and integrity, however, the small size and relative isolation of these remnant forests raises some concerns about

their ecological resilience and viability.(R2)

► **Sustainable finance**

**Some Concern**

No recent data for UKR and SK

The financing in Germany is provided by the parks' authorities. The four park units have established ranger forces for both park protection and education of park visitors (R2)

► **Staff training and development**

**Data Deficient**

DD

► **Sustainable use**

**Data Deficient**

DD

► **Education and interpretation programs**

**Data Deficient**

DD

► **Tourism and interpretation**

**Some Concern**

High number of tourists in Germany and potential sport and tourism development in Ukraine(R6) might represent a potential threat to the site's integrity.

► **Monitoring**

**Data Deficient**

DD

► **Research**

**Mostly Effective**

Considering the long history of scientific research and established monitoring sites within the properties, they offer much value for science in monitoring the potential effects of global climate change. (R1)

GER: Ecological research, monitoring and science programs are on-going guided by unit management plans and in cooperation with universities, EUROPARC Germany, UNESCO biosphere reserves, and nearby nature parks. (R2)

## **Overall assessment of protection and management**

### **Some Concern**

All component areas have a high legal protection status. However, there are some concerns about the consistency of the legal regimes of the property as a whole, and specifically within the Slovakian part of it. Some progress has also been achieved in improving trilateral cooperation with the establishment of a Joint Management Committee (SOC report, 2014). However, the efficiency of the Joint management structure is still to be demonstrated. The overall management plan of the Poloniny NP, in which all clusters from Slovakia are located, remains of concern. However, upon pressure from the Council of Europe that awarded the Poloniny park with the European diploma, the Ministry of environment of the Slovak Republic, with support from the Ministry of land use and rural development has engaged in a consultative process to implement a set of measures seeking to improve the quality of the management of the Poloniny NP.

### **► Assessment of the effectiveness of protection and management in addressing threats outside the site**

#### **Some Concern**

Despite the protection status of the buffer zones, they do not always fulfill this function. Moreover there is direct and indirect pressure on the components from activities in the buffer zones and in the whole region.

## **State and trend of values**

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## Assessing the current state and trend of values

### World Heritage values

#### ► Evolution of central European natural ecosystems

**Low Concern**

**Trend:Improving**

German components: the return to natural development effectively implemented (R2, R8, PI). All components are under strict protection. However the size is probably insufficient to preserve the component from outside influences. Global changes might affect the natural evolution.

#### ► Undisturbed complex temperate forest

**Low Concern**

**Trend:Stable**

SK & UKR: pristine forests are well protected and have been so for many years. However they are influenced by surrounding increasing development pressure (small components). The difficult economic context would be an obstacle to extend the protection.

### Other important biodiversity values

#### ► Forest flora and fauna

The site displays an important diversity of flora and fauna. This includes all major plant and animal species normally found in higher-elevation European forests of all tree species, especially those that are rare or dependent on virgin, undisturbed forests, such as black stork. Larger and more well-known species considered rare and unique (brown bear, bison, wolf, wildcat, lynx, elk, etc.) also occupy the area. The area contains more than 1,067 vascular plant species, 80 of which are red-data-book listed (IUCN Evaluation Report, 2007).

#### ► Genetic reservoir

The site contains an invaluable genetic reservoir of beech and many species

associated and dependent on these forest habitats, and a variety of other European forest flora and fauna found here but not restricted to these specific habitats. This includes all major plant and animal species normally found in higher elevation European forests of all tree species, especially those that are rare or dependent on virgin, undisturbed forests, such as black stork.

(IUCN Evaluation Report, 2007)

## Summary of the Values

### ► **Assessment of the current state and trend of World Heritage values**

**Low Concern**

**Trend: Stable**

World heritage values are maintained for the time being. The primeval forests are well protected and have been so for many years. The component sites of the property benefit from a high level of protection; however they are influenced by the increasing development pressure, especially forest resource exploitation in the Poloniny Natural park, Slovakia. The German components of the property appear under no significant threat, except that their small size might present challenges to maintain their integrity in the future (SOC report, 2014).

### ► **Assessment of the current state and trend of other important biodiversity values**

**Low Concern**

**Trend: Stable**

Species and genetic diversity seem to be well preserved through the high protection status. Wildlife population and natural regeneration is of some concern in some of the components. In some cases the insufficient elements of connectivity might affect the population in the long run.

## Additional information

### Key conservation issues

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#### ► Wood extraction

Local

Control of logging in and around the components

#### ► Wildlife management

Local

Threat to natural regeneration of the vegetation and unbalanced animal populations; lack of predators (GER)

#### ► Sport and tourism

Local

Development of infrastructures; high concentration of visitors

### Benefits

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#### Understanding Benefits

##### ► Is the protected area valued for its nature conservation?

data deficient

Data deficient

### Projects

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#### Compilation of active conservation projects

No	Organization/ individuals	Project duration	Brief description of Active Projects
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## REFERENCES

<b>Nº</b>	<b>References</b>
1	CoE report 2011 (H. Lethier)
2	Comment Mankind in Harmony with Nature
3	Committe Decision 2007 (UKR + SK)
4	Committe Decision 2011 (GER)
5	Comparative analysis 2011
6	Confidential comment, 2012
7	IUCN Evaluation report 2007 (UKR + SK)
8	IUCN Evaluation report 2011 (GER)
9	Personal communication