

Białowieża, 27.11.2018

**Report on the State of Conservation  
of the Białowieża Forest World Heritage Site  
(Poland, Belarus) (N 33ter)**

## **1. Executive Summary of the Report**

Belarus and Poland, the State Parties to the Convention, acknowledged with due attention Decision 41 COM 7B.1 of the World Heritage Centre adopted during its 41<sup>st</sup> session (Cracow, 2017), concerning the Białowieża Forest World Heritage Site. Referring to the provisions of the Decision imposing specific commitments on the State Parties, we submit to the World Heritage Centre information on the progress in the implementation of the Decision and the state of conservation of the Site.

All the provisions of Decision 41 COM 7B.1 are implemented by the State Parties.

State Forests does not carry out commercial wood logging. Since 27 July 2017 until the present time wood has been harvested in the areas of the Browsk, Białowieża and Forest Districts **only** to cut trees which pose a danger to human health and life. Some of the trees cut to ensure public safety are left on a given plot for the purpose of their natural decomposition, whereas the other part of wood must be removed from the stand, among others, for fire protection purposes. The State Parties are committed to ensuring that all the elements constituting the *Outstanding Universal Value* (OUV) of the Site are protected, while conservation measures do not cause any threat to the OUV.

The State Parties inform that meeting the recommendations of the Decision they received the UNESCO/IUCN Reactive Monitoring Mission to the Białowieża Forest World Heritage Site. It took place on 24 September-1 October 2018.

Work is underway to prepare the Integrated Management Plan for the World Heritage Site which will be fully consistent with the provisions of the Convention Concerning the Protection of the World Cultural and Natural Heritage, the EU and national legislation on environmental protection, as well as the obligations imposed in relation to the status of a Biosphere Reserve. The Transboundary Management Plan for the Białowieża Forest World Heritage Site will be prepared as part of the works of the Polish-Belarusian Working Group on the Transboundary World Heritage Site. The basis for the preparation of the document will be the need to protect the Outstanding Universal Value (as defined in Decision 38 COM 8B.12). The Management Plan will define, among others, common conservation areas, such as integrity, water regime, tourist access and the transboundary management framework.

The Ministry of the Environment of the Republic of Poland, the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus and all the authorities managing the area of Białowieża Forest take all efforts to strengthen their mutual cooperation and to continue their dialogue with the local communities and nongovernmental organisations. The documents required by the Decisions of the UNESCO World Heritage Centre are prepared and agreed at the forum of the Polish-Belarusian Working Group on the Białowieża Forest Transboundary World Heritage Site.

The present Report was prepared before the State Parties received the report from the UNESCO/IUCN Reactive Monitoring Mission.



## 2. Recommendations of Decision 41 COM 7B.1 of the World Heritage Centre and information on their implementation

### 2.1 The Białowieża National Park

The recommendations laid down in points 4 to 6 of the Decision do not apply to the area managed by the BNP. The recommendation in point 7 was carried out on 24.09-01.10.2018 as a result of the implementation of the UNESCO/IUCN Reactive Monitoring mission to the Site with the participation of the BNP. The BNP participated in the development of the assumptions for the draft management plan for the management of the World Heritage Site, thus implementing point 8 of the Decision. The draft assumptions for the draft Management Plan for the Białowieża Forest Site were submitted in January 2017 to the World Heritage Centre.

### 2.2. The State Forests National Forest Holding

4. Notes the information provided by the States Parties regarding the activities termed sanitary cuttings undertaken in the Polish part of the property and the conclusions of the Strategic Environmental Assessment (SEA) of the Amendment to the Forest Management Plan for the Białowieża Forest District but, noting that the separate evaluation of potential impacts on the Outstanding Universal Value (OUV) of the property mainly summarized the conclusions of the SEA, considers that the focus of the SEA on assessing potential impacts to the Natura 2000 site "Puszcza Białowieska", does not represent an adequate assessment of impacts on the OUV of the property;

Since 20 November 2017 the Białowieża Forest District has not harvested wood under the amendment to the Forest Management Plan (FMP). With a view to protecting the Outstanding Universal Value of the Site against fire hazards which have substantially grown recently as a result of a massive spruce dieback caused by a bark beetle outbreak and the presence of deadwood, as well as in light of the threat to human life and health posed by spontaneously falling dead trees, procedures were initiated to prepare amendments to the Forest Management Plans for the Forest Districts of: Białowieża (a new amendment), Browsk and Hajnówka. In particular, the methodological assumptions adopted for the elaboration of the amendment documentation take into account the needs of the conservation of the OUV. As part of the work on the amendments, an assessment will be carried out to determine the impact of the proposed activities on the OUV. Independently of the other documentation, it will be consulted with the UNESCO Committee. The assessment of the impact on the OUV will be carried out taking into account the IUCN recommendations.

5. Reiterates its position that commercial timber extraction within the entire property would represent a potential danger to the property in accordance with Paragraph 180 of the *Operational Guidelines*, and notes with utmost concern the infringement decision issued by the European Commission in relation to Białowieża Forest in Poland, which noted that increased logging is likely to adversely affect the conservation of the site's habitats and species as well as cause irreparable biodiversity loss, including through removal of 100-year and older trees, and that these measures would, according to the evidence available, exceed those that would be necessary for ensuring the safe use of the forest;



It is informed that the Białowieża, Browsk and Hajnówka Forest Districts do not carry out commercial wood logging. Since 27 July 2017 until now, in the areas of the Białowieża, Browsk and Hajnówka Forest Districts wood has been **only** harvested exclusively in relation to the removal of trees which pose a danger to human health and life. Some of the trees cut to ensure public safety are left on a given plot for the purpose of their natural decomposition, whereas the other part of wood must be removed from the stand, among others, for fire protection purposes. The wood transported out of the logging site is subject to recording, in accordance with the Polish law. In such a situation, the manager of the Site pursues a reasonable course of action (in compliance with the law) by selling the wood.

It should be pointed out that the initial results of the nature inventory which has been carried out in 2016 to 2018 in the area of Białowieża Forest indicate that the state of conservation of the natural habitats and species which are the objects of protection on the Natura 2000 site has not deteriorated as a result of the forest management operations performed.

6. Reiterates its request to the State Party of Poland to maintain the continuity and integrity of protected old-growth forest in Białowieża Forest and strongly urges it to immediately halt all logging and wood extraction in old-growth forests, and to clarify third party reports about logging targeting species other than those affected by bark beetle, which cannot be justified as so-called sanitary cuttings;

All the logging-related works are caused by the need to ensure the safety of people and property as well as fire safety. At present, in the zone including the old-growth forest, in light of the huge number of dead spruce trees, in case a danger emerges (e.g. dead spruce trees inclined towards roads, tourist trails and other places visited by tourists), such trees are also cut and left on the spot. The situations of logging targeting species other than spruce involve single cases of trees which posed a danger or were severely damaged when dangerous trees were cut.

Bearing in mind the scale of the spruce dieback (as a result of a bark beetle outbreak lasting in the period from 2012 until now, 1,4 million trees have died on the Site Białowieża Forest Transboundary World Heritage), the measures described here have taken place and will take place; in light of this, we invite you to take the above clarification into consideration; nevertheless, considering the provisions of the World Heritage Convention, the manager of the area is always guided by the need to maintain the sustainability and integrity of the protected old-growth forest in Białowieża Forest.

7. Requests the States Parties to invite a joint World Heritage Centre/IUCN Reactive Monitoring mission to the property to evaluate current and potential impacts of ongoing and planned forest management operations on the OUV of the property and to assess whether the property meets the criteria for inscription on the List of World Heritage in Danger;

The UNESCO/IUCN Reactive Monitoring Mission to the Białowieża Forest Transboundary World Heritage Site took place in the period from 24 September to 1 October 2018 and that is why it does not contain references to the experts' recommendations.

8. While also noting the conclusion of the States Parties that the preparation of the Transboundary Management Plan for the property will require several years, also reiterates its request to the States Parties to prepare such a Plan as a matter of priority in order to ensure a coordinated approach to the management of the property and to guarantee that no actions can be allowed within the entire property that could negatively impact on its OUV;

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Work is underway to prepare the Integrated Management Plan for the World Heritage Site which will be fully consistent with the provisions of the Convention Concerning the Protection of the World Cultural and Natural Heritage, the EU and national legislation on environmental protection, as well as the obligations imposed in relation to the status of a Biosphere Reserve.

With his Order of 24 May 2018, the Minister of the Environment appointed an expert team to prepare recommendations concerning the Management Plan for the Białowieża Forest World Heritage Site. Representatives of different scientific communities from Poland and abroad joined the team.

The Transboundary Management Plan for the Białowieża Forest World Heritage Site will be prepared as part of the works of the Polish-Belarusian Working Group on the Transboundary World Heritage Site. The basis for the preparation of the document will be the need to protect the Outstanding Universal Value (as defined in Decision 38 COM 8B.12). The Management Plan will define, among others, common conservation areas, such as integrity, water regime, tourist access and the transboundary management framework. The preliminary results of the works of the expert team expected to prepare the recommendations for the Management Plan for the Białowieża Forest Transboundary World Heritage in its Polish part will be presented at the forum of the Polish-Belarusian Working Group in the 1<sup>st</sup> quarter 2019. If necessary, the Group will consult the experts from the World Heritage Centre and the IUCN. It is expected that the work on the Transboundary Management Plan will be completed by 2022.

### **3. Other current conservation issues identified by the State(s) Party(ies) which may have an impact on the property's Outstanding Universal Value**

The Polish part of Białowieża Forest is managed by different entities, i.e. the Białowieża National Park and three Forests Districts belonging to the State Forests National Forest Holding: the Białowieża, Browsk and Hajnówka Forest Districts. In addition, here there are also different, mutually overlapping forms of nature conservation and, in consequence, also different nature conservation authorities are responsible for the implementation of tasks within the area of Białowieża Forest. The Belarusian part of Białowieża Forest is managed by the Belavezhskaya Pushcha National Park.

#### **3.1 The Białowieża National Park**

1. The implementation of the conservation measures under the Conservation Plan for the Białowieża National Park

The Białowieża National Park focused on the implementation of the measures laid down by the provisions of the Conservation Plan established on 7 November 2014. In 2017 and 2018 (until the end of September), the following was carried out as part of these measures:

- 1) Non-forest ecosystems were maintained (grass cutting with biomass removal). In 2017, grass was cut in 116 ha of meadows and 71 tonnes of hay and 109 tonnes of haylage were harvested. 60 tonnes of hay were purchased from external suppliers. In 2018, grass was cut in 126 ha and 114 tonnes of hay and 64 tonnes of haylage were harvested. 70 tonnes of hay were purchased from external suppliers. All of them were used to feed animals in free roaming herds and those reared in captivity.



- 2) Alien species were eliminated from forest ecosystems: in 2017, this was done in an area of 3 ha, while in 2018 in an area of 22 ha.
- 3) Measures to conserve the European bison:
  - a) the supplementary winter feeding sites were kept in the appropriate sanitary veterinary conditions;
  - b) as part of the supplementary winter feeding of the European bison, feed was provided in 26 places in 2017 and in 20 places in 2018, in the amounts specified above;
  - c) the European Bison Breeding Centre was operated; the small European bison population (about 30 individuals) kept at the Centre constitutes a sui generis genetic bank in case of an epizootic among the animals in free roaming herds.
- 4) Educational measures (14 educational events in 2017 and 9 events until September 2018); as part of them, the participants were provided with information on the Białowieża Forest Transboundary World Heritage Site.
- 5) Nature monitoring measures carried out by the staff of the BNP, covering, among others, the crested newt, selected bird species (including e.g. woodpeckers, pygmy owl, boreal owl, hazel hen, corncrake and honey buzzard), otter, beaver, lynx, wolf and European bison.
- 6) Measures to maintain the good condition of tourism and road infrastructure for fire protection purposes: in 2017, roads with a total length of about 3.5 km were repaired. As part of the same measures, works were performed to maintain the passability of roads with a total length of 279 km and 167 km, respectively, in 2017 and 2018. Part of the wood removed from the road was left to mineralise, while the other part of it was sold to meet the needs of the local population (51 m<sup>3</sup>).

In carrying out conservation measures, the Białowieża National Park harvested 676 m<sup>3</sup> of wood in 2017 and until the end of September 2018. The harvested amount of wood resulted from the measures intended to:

- 1) make the road passable in the area subject to active conservation - 51 m<sup>3</sup> of wood;
- 2) remove the excessive amount of lying trees and dead trees posing a danger to the safety of employees' and animals' movement in the enclosures of the European Bison Breeding Centre - 625 m<sup>3</sup> of wood.

The wood was sold on the local market to the residents of the local Communes (of Białowieża, Hajnówka and Narewka). In terms of assortments, this included was 482 m<sup>3</sup> of fuelwood, representing 73% of the total amount harvested (assortments M and S4), and 185 m<sup>3</sup> of assortments S2a and WD. Medium- and large-sized wood was also sold to residents or entities doing business in the areas of the Communes of Białowieża, Hajnówka and Narewka.

The Białowieża National Park used 9 m<sup>3</sup> of wood to meet its own needs (mostly to repair the technical infrastructure of the European Bison Breeding Centre).

There were no wood thefts in the area of the Białowieża National Park.

No measures taken by the Białowieża National Park had an adverse impact on the OUV of the World Heritage Site inscribed on the basis of criteria IX and X.

## 2. Information on the transboundary cooperation in all fields

In 2017 and 2018, the activities of the partners of the Transboundary World Heritage Site Białowieża Forest in the field of transboundary cooperation included:

- 1) the participation in the meetings of the Scientific Councils of the Białowieża National Park and the Belovezhskaya Pushcha National Park;
- 2) the participation in the meetings of the Steering Committee;



- 3) the co-organisation of the Scientific Conference on "Tourism in Valuable Natural Areas", together with the Local Faculty of Forestry of the Białystok University of Technology in Hajnówka;
- 4) the participation in the meetings of the Working Group on the Białowieża Forest Transboundary World Heritage Site as part of the Polish-Belarusian Committee for Cooperation in Environmental Protection.

### 3. Tourist pressure

The tourist traffic in the facilities of the Białowieża National Park in 2017 was as follows: in that year, the area of the former Strict Reserve was visited by about 26,000 persons, including about 2,500 foreigners, the Nature and Forest Museum by about 73,000 persons, including about 3,700 foreigners, and the European Bison Demonstration Reserve by about 150,000 persons, including about 8,700 foreigners.

Until October 2018, the area of the "Strict Reserve" in the BNP was visited by about 24,500 persons, including about 4,500 foreigners, the Nature and Forest Museum by about 61,000 persons, including about 3,000 foreigners, and the European Bison Demonstration Reserve by about 139,000 persons, including about 7,000 foreigners.

Within the Strict Reserve, to an increasing extent, different methods are applied to limit the anthropressure, including e.g. the erection of moveable walkways in places most vulnerable to trampling and a reduction of tourists per one guide from 20 to 12 persons.

Within the BNP, there are 44.3 km of tourist trails and routes. In 2017 and until October 2018, a section of about 1 km was closed for a total period of 48 days due to intensive rainfalls and excessive drenching of routes. Because of strong winds, the 4 km long route to the Jagiello Oak was excluded from tourism traffic for a total period of 17 days, while for 8 days the whole forest area of the Park (except for the European Bison Demonstration Reserve) was closed to tourist traffic.

Within the BNP, no works were carried out to harvest wood in order to ensure the safety of tourist traffic.

4. The educational activities implemented by the Białowieża National Park. The number of participants, target groups, topics and types of activities

As part of the educational activities implemented by the staff of the Scientific and Educational Department of the Białowieża National Park in the period from 2017 to 10.2018, a large number of classes were addressed mainly to children and youth from schools and other education and upbringing establishments in the Białowieża Forest Euroregion. They included e.g. indoor and outdoor educational classes, competitions in nature-related and ecological knowledge, thematic walks, ecological and educational festivals and an exhibition of Białowieża Forest mushrooms. As a total, about 18,500 persons took part in all these activities.

### 5. Cultural aspects

The activities of the Białowieża National Park related to cultural education included e.g. the organisation of exhibitions on diverse topics and the cooperation with different institutions, consisting in the participation in conferences and thematic meetings. Educational and museum-based classes and workshops were also organised.

6. The monitoring of the current state of the environment and nature



The monitoring of the current state of the environment and nature in the area of the Białowieża National Park in the period from 2017 to June 2018 (the implemented research projects and monitoring surveys).

Research projects and monitoring surveys implemented by the BNP with its own resources:

- The structure and dynamics of the forests in the BNP
- The monitoring of the abiotic environment and the hydrological conditions in the BNP
- The valorisation of the meadows in the BNP
- The monitoring of the plants of special concern (Natura 2000, the Red Data Book and species-specific conservation)
- The monitoring of invasive species in the BNP


Research projects and monitoring surveys implemented by external institutions in agreement with the BNP:

Item	Project title	Institution(s) implementing the project	Project Manager	Collaborators from the Park (if any)	Duration
1	Research on selected groups of fungi, fungus-like organisms and Myxomycota in the BNP	Białowieża Forest District Jagiellonian Univ. Dept. of Biology of Medical University of Białystok Univ. of Helsinki Institute for Agricultural and Forest Environment of the Polish Academy of Sciences	Dr. R. Krzyściak – Kosińska Dr. A. Drozdowicz Dr. M. Orłowska Prof. T. Niemela Dr. A. Kujawa		2013 – multiannual
2	Research on the role of the cryptogams in the structure and dynamics of forest communities	Białowieża Geobotanical Station of Univ. of Warsaw Univ. of Gdańsk Jan Kochanowski Univ.	Dr. B. Jaroszewicz, Ph.D. Prof. M. Kukwa Dr. A. Lubek		1987 – continuous
3	The ecology and taxonomy of multipore fungi in a primeval forest	Faculty of Mycology of Univ. of Helsinki	Prof. Tuomo Niemela		2013 - multiannual
4	The diversity of corticioid fungi colonising wood in natural forests	Institute of Botany of the Polish Academy of Sciences	Dr. Dariusz Karasiński		2016-2018
5	The dynamics of vegetation in a	Białowieża	Dr. B.		1963 -

	natural landscape. The variation of structure and dynamics of forest communities	Geobotanical Station of Univ. of Warsaw	Jaroszewicz, Ph.D.		continuous
6	The dynamics of vegetation in a natural landscape. The seasonal rhythm of forest communities	Białowieża Geobotanical Station of Univ. of Warsaw	Dr. B. Jaroszewicz, Ph.D.		1963 - continuous
7	The dynamics of vegetation in a natural landscape. Observations on the phenological variations of selected trees	Białowieża Geobotanical Station of Univ. of Warsaw	Dr. B. Jaroszewicz, Ph.D.		1963 - continuous
8	The dynamics of vegetation in a natural landscape. Observations on the encroachment of trees into a peat-bog	Białowieża Geobotanical Station of Univ. of Warsaw.	Dr. B. Jaroszewicz, Ph.D.		1980 - continuous
9	The dynamics of plant populations and communities in abandoned meadows	Białowieża Geobotanical Station of Univ. of Warsaw Inst. of Biology of Academy of Podlasie in Siedlce	Dr. B. Jaroszewicz, Ph.D. Dr. L. Borkowska		1974 - continuous
10	The colonisation of Białowieża Forest by alien species and the expansions of native species	Białowieża Geobotanical Station of Univ. of Warsaw	Dr. W. Adamowski Dr. B. Jaroszewicz, Ph.D.		1994 - continuous
11	The role of dead carbon in the storage of carbon and nitrogen	Białowieża Geobotanical Station of Univ. of Warsaw	E. Chećko, M.Sc. Dr. B. Jaroszewicz, Ph.D.		2011 - multiannual
12	The secondary succession on post-agricultural land in settlement clearings in Białowieża Forest	Białowieża Geobotanical Station of Univ. of Warsaw	Dr. B. Jaroszewicz, Ph.D.		1998 - continuous
13	The valorisation of meadows in the area of the BNP and the elaboration of methods for their conservation	Faculty of Biology and Environmental Protection of Univ. of Lodz	Prof. L. Kucharski	M. Karczewski, a M.Sc., A. Karczewski, M.Sc. Eng.	2011 - multiannual
14	The factors affecting boar rooting in the Tilio-Carpinetum stachyetosum sylvaticae in the BNP	Białowieża Geobotanical Station of Univ. of	Dr. B. Jaroszewicz, Ph.D.		1971 - continuous



		Warsaw			
15	The effect of the use of forest ecosystems on the ecosystem processes and mutualist networks of dependencies in mixed temperate climate forests in Eastern Poland	Department of Ecology, Philipps Universitat, Marburg,	J. Albrecht, M.Sc.		2011-2019
16	The natural history of Białowieża Forest in light of palaeoecological research	Laboratory of Palaeoecology and Archaeobotany of Univ. of Gdańsk	Prof. M. Latałowa	A. Keczyński, M.Sc.	2010 – multiannual
17	The directions of natural succession of forest communities as the basis for silviculture methods in Białowieża Forest	Dept. of Natural Forests of Forest Research Institute	Dr. R. Paluch, Ph.D.		1983 - multiannual
18	The collection and assessment of the ecotypes of grasses and other dicotyledonous species	Botanical Garden of Plant Breeding and Acclimatization Institute	Dr W. Majtkowski		1972 - multiannual
19	The growth dynamics of natural stands on permanent experimental plots in Białowieża Forest	Dept. of Forest Silviculture of Warsaw Univ. of Life Sciences (SGGW)	Prof. B. Brzeziecki and his team		1936 - continuous
20	The factors affecting oak regeneration in post-agricultural areas in compartment 401 of the BNP	Univ. of Rzeszów	Dr. A. Bobiec, Ph.D.		2011-2020
21	Changes in the species composition of the phytocenosis and structure of riparian ash and alder stands in Białowieża Forest under the impact of beaver activity	Forest Research Institute	R. Gawryś, M.Sc.		2015-2018
22	The comprehensive monitoring of stand dynamics in Białowieża Forest using remote sensing data	Dept. of Natural Forests of Forest Research Institute	Dr. R. Paluch, Ph.D.		2015-2020
23	The age structure and development history of oak-pine-spruce stands under the natural conditions of Białowieża Forest	Dept. of Natural Forests of Forest Research Institute	E. Zin, M.Sc.		2011- multiannual
24	Long-term changes in the species composition and abundance of selected groups of invertebrates in the natural ecosystems of Białowieża Forest	Dept. of Natural Forests of Forest Research Institute	Prof. J. Gutowski		1988 – multiannual

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25	Saproxyllic beetles as an indicator of deformation of the fresh coniferous forest ecosystems	Dept. of Natural Forests of Forest Research Institute	Prof. J. Gutowski		1991 - multiannual
26	Changes in the species and quantitative composition of beetles as a result of disturbance caused by fires in the ecosystems of pine and spruce coniferous forests	Dept. of Natural Forests of Forest Research Institute	Prof. J. Gutowski		2009- multiannual
27	The distribution and density of herpetofauna in the BNP	Białowieża Forest District	Dr. R. Krzyściak - Kosińska		2004 - multiannual
28	The physicochemical and biotic conditions in permanent and periodical water reservoirs in Białowieża Forest	Białowieża Forest District Local Faculty of Forestry of Białystok Univ. of Technology in Hajnówka Dept. of Natural Forests of Forest Research Institute Dept. of Biology of Medical University of Białystok	Dr. R. Krzyściak - Kosińska		2008 - multiannual
29	Research on the abundance of breeding birds on permanent plots	Dept. of Avian Ecology of Institute of Zoology of University of Wrocław	Prof. T. Wesółowski and his team		1975 - multiannual
30	The breeding biology of collared and pied flycatchers under the conditions of a natural oak-hornbeam forest in the BNP	Dept. of Zoology of Academy of Podlasie	Dr. W. Walankiewicz, Ph.D.		1988 - multiannual
31	The monitoring of the breeding sites and parameters of the lesser spotted eagle and black stork	PTOP	Paweł Mirski		2017-2018
32	Ecology and strategy for the conservation of the European bison	Mammal Research Institute of Polish Academy of Sciences	Prof. M. Krawczyńska Dr. R. Kowalczyk, Ph.D.		1996 - continuous
33	The functioning of the European bison population in Białowieża Forest.	Mammal Research Institute of Polish	Prof. M. Krawczyńska		1996 - continuous

	Research on the postnatal development of the European bison	Academy of Sciences	Dr. R. Kowalczyk, Ph.D.		
34	Genetic and breeding research on the Białowieża population of the European bison	Faculty of Animal Sciences of SGGW	Prof. W. Olech-Piasecka		1994-continuous
35	- The assessment of spermatogenesis in male European bison in different age groups - The assessment of oogenesis in female European bison in different age groups	Dept. of Histology and Embryology of Medical Univ. of Białystok	Dr. E. Czykier, Ph.D.		2005 – multiannual
36	A morphological evaluation of selected organs of the European bison (the trachea and bronchi)	Dept. of Histology and Embryology of Medical Univ. of Białystok	Dr. E. Czykier, Ph.D.		2015-2020
37	A morphological evaluation of selected organs of the European bison (the liver, kidneys, adrenal glands, pancreas, spleen, salivary glands, heart, lungs, parathyroid glands, lymph nodes, thymus, testicles and epididymis) and the measurement of sex hormones in serum	Dept. of Histology and Embryology of Medical Univ. of Białystok	Dr. E. Czykier, Ph.D.		2015-2019
38	Selected haematological and biochemical indicators of the body fluids of the European bison	Dept. of Veterinary Medicine of Univ. of Warmia and Mazury	Prof. Z. Kuleta		2005 – multiannual
39	Blood parasites in the European bison: the dynamics of occurrence and vectors	W. Stefański Inst. of Parasitology of Polish Academy of Sciences	Dr. G. Karbowski, Ph.D.		2007 – multiannual
40	The protozoan <i>Neospora caninum</i> in the European bison living in Poland	Institute of Parasitology of Polish Academy of Sciences	Prof. W. Cabaj		2012 – multiannual
41	The monitoring of the helminth infestation of the European bison in Białowieża Forest	Institute of Parasitology of Polish Academy of Sciences	Prof. A. Demiaszkiewicz		2012-2020
42	The spread of virus infections in the European bison and other free roaming ruminants in the BNP	National Veterinary Research Institute	Dr. M. Larska, Ph.D.	Dr. M. Krzysiak	2013- multiannual
43	Analysis of the genome of the	Faculty of Animal	Prof. S.		2013-2018

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	European bison	Bioengineering of Univ. of Warmia and Mazury	Kamiński		
44	Research on the angioarchitectonics of selected organs of the abdominal cavity and the heart of the European bison	Medical University of Lodz	Dr. M. Polgaj, Ph.D.		2013-2018
45	The long-term dynamics of the populations of small mammals in the natural forests of Białowieża Forest	Mammal Research Institute of Polish Academy of Sciences	Prof. B. Jędrzejewska Dr. K. Zub, Ph.D.		1946 – continuous
46	The species-specific diversity of small mammals in the northern part of the BNP	Faculty of Forestry of SGGW	Dr. E. Jancewicz	A. Karczewski, M. Sc. Eng.	2015-2018
47	The genetic variation in the populations of small mammals	Mammal Research Institute of Polish Academy of Sciences	Prof. J.M. Wójcik		1986 – continuous
48	The functioning of the predator and prey system in the natural forests of Białowieża Forest - The ecological basis for the conservation of large predators Białowieża Forest - The predator and prey relationships in vertebrate communities - The mechanisms of the functioning of the populations of medium-sized predators	Mammal Research Institute of Polish Academy of Sciences	Prof. B. Jędrzejewska Dr. K. Schmidt, Ph.D., Dr. A. Zalewski, Ph.D. Dr. R. Kowalczyk, Ph.D.		1985 – continuous
49	The ecological and genetic basis for controlling the abundance of the American mink: the response of the population of an invasive predator species to a reduction in its size	Mammal Research Institute of Polish Academy of Sciences	Dr. A. Zalewski, Ph.D.		2008 – continuous
50	Inventories of the wolf and lynx in Forest Districts and National Parks in Poland	Mammal Research Institute of Polish Academy of Sciences	Dr. K. Schmidt, Ph.D.		2000 – continuous
51	The best of bad compromises – the evolutionary factors shaping the sociality of male bats	Mammal Research Institute of Polish Academy of Sciences	Dr. Ireneusz Ruczyński		2014-2018
52	Phenotypic and genetic adaptations of two weasel subspecies to different	Mammal Research Institute of Polish	Dr. Karol Zub, Ph.D.		2014-2018

	climate conditions	Academy of Sciences			
53	The role of livestock grazing in the shaping of forests of Białowieża Forest in the last five centuries	Mammal Research Institute of Polish Academy of Sciences	Dr. Tomasz Samojlik		2014-2019
54	The cultural heritage of Białowieża Forest in light of non-invasive archeological research	Institute of Archaeology of Cardinal Stefan Wyszyński Univ.	Dr. J. Wawrzeniuk		2016 - 2019
55	An assessment of the state of the forest environment in the low-risk zone	Dept. of Natural Forests of Forest Research Institute	Prof. E. Malzahn		1986 – multiannual
56	The variability of stoichiometry of elements in the moss <i>Pleurozium schreberi</i> on a large spatial scale (Poland) under the conditions of varied anthropopressure	Institute of Botany of Polish Academy of Sciences	Prof. B. Godzik		(since 1990 samples taken every five years)
57	Research on variations in the Earth's magnetic field	Institute of Geodesy and Cartography	Team		1937 – multiannual
58	Research on the Earth's gravitational field	Institute of Geodesy and Cartography	Team		1937 – multiannual

**7. Developments which may affect the Outstanding Universal Value of the property, including integrity. The Educational Pavilion at the European Bison Demonstration Reserve (EBDR) of the Białowieża National Park**

The European Bison Demonstration Reserve (EBDR) is an exceptional facility designed to provide comprehensive and holistic knowledge of the European bison, the symbol of the strength and, at the same time, the fragility of nature. The measures now carried out here meet the current world standards and have an educational character. Perceived as an exceptional facility of this type in the world, the EBDR is designed to provide active and passive education, including the appropriate presentation of the idea of the restitution of the European bison.

The Educational Pavilion built at the EBDR combines many functions. Firstly, by using advanced means and technical tools in the proposed exhibition and applying different media forms (computer animations, audio messages, films, interactive media etc.), it disseminates in a reliable and, at the same time, an attractive manner the knowledge of the European bison and its ecosystem-based relationships with other species present in Białowieża Forest; thus, indirectly, also the knowledge of all the riches and diversity of this unique forest complex which constitutes the natural world heritage.

The architectural concept of the building of the pavilion refers to the tradition of local building. The design of the modern facility of tourist infrastructure using a traditional material (wood) and in a form referring to the local building contributes to promoting the cultural heritage of the region and strengthens the regional awareness of the local community and its feeling proud of the unique values of the cultural

and natural environment, as well as the awareness of the need to conserve them. At the same time, the design of the building as a passive one, using as much as possible renewable energy sources and, thus, a highly environment-friendly one, is a message in itself, with an educational undertone.

The facility plays the role of the main gateway to the European Bison Demonstration Reserve. It houses: exhibition rooms on the biology, ecology and history of the restitution of the European bison; a small cinema room with about 40 seats, toilets for visitors, resting places for visitors, ticket desks, social and technical rooms. Its compact solid prevents heat losses, while its large glass-covered planes facing the south help absorb solar energy and most of its space facing the north is hidden underground. This is a single-story building with a mezzanine which provides access to a "green" roof. The building has a ferro-concrete construction and a traditional form of its aboveground part – consisting of three wings covered by gabled roofs. The wooden facade has regional colours. The useful space of the facility is 1,350 m<sup>2</sup>. The building is equipped with a number of modern and energy-saving installations: a ground to air heat exchanger, a mechanical ventilation system with heat recovery, a biological wastewater treatment system, a system for the capture of rainwater to be used to flush toilets, a floor heating system supplied by a heat pump and domestic water is heated by solar collectors. The lighting in the building is mainly based on energy-saving LED luminaires. Near the building, there is a 40 kW photovoltaic farm.

### 3.2 The State Forests National Forest Holding

#### 1. The real currently protected area – numbers and surface area (for each of the UNESCO zones)

- *area – based forms of nature conservation,*
- *conservation zones for birds and other species,*
- *nature monuments,*
- *wet habitats excluded for conservation purposes,*
- *stands older than 100 years (at least 10 % of volume of trees aged 100 years or more).*

The tables below present the statutory forms of nature conservation and other valuable natural sites in the individual zones of the World Heritage Site.

**Table 1.** *Forms of nature conservation and other valuable natural sites – the partial conservation zone 1*

Form of nature conservation	Białowieża Forest District		Hajnowka Forest District		Browsk Forest District		Total	
	(Number)	ha	(Number)	ha	(Number)	ha	(Number)	ha
Nature reserves	7 (5)	4,305.32	13(13)	5,758.67	4(3)	1,964.67	<b>21</b>	<b>12,028.66</b>
Species-specific conservation zones in nature reserves		0		0		128.3		128.03
Wet habitats in nature reserves		2,661.49		3,411.83	7	1,838.7		7,912.02
Post-Century (pioneering) habitats in nature reserves		181.16		107.07		16.55		304.78

Stands older than 100 years in nature reserves		3,424.92		3,400.18		1,133.6		7,958.7
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The partial protection zone 1 includes nature reserves. The other forms of nature conservation listed in the table occur in nature reserves; in light of this, the real surface area of the abovementioned zone is limited to the surface area of the nature reserves. Two reserves: the *Natural Forests of Białowieża Forest* and the *Władysław Szafer Nature Reserve* are situated, respectively, within two and three Forest Districts. For this reason, in addition to the real number of nature reserves in the individual Forest Districts, the number of nature reserves is given in brackets, assigning them to those Forest Districts where the largest surface area of a nature reserve can be found. As a total, there are 21 nature reserves. It should be pointed out that this year the procedure to expand the “Lipiny” nature reserve was completed. This measure was initiated by the Hajnówka Forest District. The current surface area of the nature reserve is 56.28 ha (the original surface area was 24.51 ha).

**Table 2.** Forms of nature conservation and other valuable natural sites – the partial conservation zone 2

Form of nature conservation	Białowieża Forest District		Hajnówka Forest District		Browsk Forest District		Total	
	(Number)	ha	(Number)	ha	(Number)	ha	(Number)	ha
Species-specific conservation zones		405.57		669.53		1,235.39		<b>2,310.49</b>
Reference stands (under Decision 101)		2,552.60		0		1,473.45		4,026.05
Wet habitats		968.12		4,674.32		5,364.9		11,007.34
Post-Century (pioneering) habitats with stands older than 60 years dominated by aspen and birch		30.99		384.18		43.67		<b>458.84</b>
Stands older than 100 years		3,424.92		3,335.21		5,319.9		<b>12,080.03</b>

The partial protection zone 2 includes stands older than 100 years, pioneering stands older than 60 years and dominated by birch and aspen, as well as the protective zones around bird nests and lichen sites.

**Table 3.** Forms of nature conservation and other valuable natural sites – the active conservation zone

Form of nature conservation	Białowieża Forest District		Hajnówka Forest District		Browsk Forest District		Total	
	(Number)	ha	(Number)	ha	(Number)	ha	(Number)	ha
Reference stands (under		1,584.68		0		0		1,584.68

Decision 101)						
Wet habitats		10.11				10.11
Species-specific conservation zones		1.06	106.99			108.05
Post-Century (pioneering) habitats with stands older than 60 years dominated by aspen and birch		7.36			105.38	112.74
Stands older than 100 years		603.59	764.58			1,368.17

**The active conservation zone** includes areas that do not fulfill the criteria of the partial protection zone 2 indicated in the document "Management Plan for the World Heritage Property "Białowieża Forest" Roadmap for preparation and implementation" (which is part of the re-nomination application).

The individual forms of nature conservation presented above often overlap. In addition, in the whole area of Białowieża Forest, the Białowieża Forest Natura 2000 Site PLC200004 and the Białowieża Forest Protected Landscape Area have been designated. In the whole area of the World Heritage Site, there are dispersed nature monuments – the data on them are given in the table below.

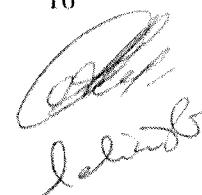
**Table 4. Nature monuments**

Forest District	Number of nature monuments
Białowieża	499
Browsk	83
Hajnówka	546
<b>Total</b>	<b>1,128</b>

## 2. Bark beetle outbreak

Since 2012, as a result of a bark beetle outbreak on whole Polish part of Białowieża Forest, the deadwood resources currently amount to 5.7 million m<sup>3</sup>. In the Transboundary World Heritage Site Białowieża Forest, more than 1,4 million trees, representing more than 1.7 million m<sup>3</sup> of wood, died in the period from 2012 to 2018.

**Table 5. The surface area of stands with a share of spruce (with the share of spruce of 10% and more, acc. to the FMP) in the individual Forest Districts in ha: including stands older than 100 years**





Forest District	Surface area of stands with a share of spruce (with the share of spruce of 10% and more, acc. to the FMP) (ha)	Including spruce stands older than 100 years (ha)	Surface area of dead stands, acc. to estimated data (ha)
Białowieża	10,252.91	5,374.86	4,200
Browsk	10,519.38	6,453.5	1,200
Hajnówka	15,190.97	6,768.62	2,100
Total	35,963.26	18,596.98	7,500

In order to give an exact surface area of dead stands, a detailed inventory must be carried out on the ground.

**Table 6.** The number and volume ( $m^3$ ) of trees infested by bark beetle – as of 31.10.2018

Forest District	Number of infested spruce trees in 2018	Volume ( $m^3$ ) of infested spruce trees in 2018 r.	Number of infested spruce trees from 2012 to 31.10.2018	Volume ( $m^3$ ) of infested spruce trees from 2012 to 31.10.2018
Białowieża	15,968	16,833	555,774	709,404
Browsk	123,349	122,887	439,199	478,813
Hajnówka	142,037	169,876	424,018	563,128
Total	281,354	309,596	1,418,991	1,751,345

Taking into account the scale of the phenomenon, with his decision Regional Director of State Forests in Białystok established the Team for the Strategy to Contain the Bark Beetle Outbreak and Renaturalise Post-Outbreak Stands in the Area of the Białowieża Forest Promotional Forest Complex. In cooperation with representatives of science, "General guidelines for halting the bark beetle outbreak and restitution of Białowieża Forest stands in the post-outbreak areas in the Białowieża Forest Promotional Forest Complex" were prepared. This document made it possible to introduce appropriate forest management practices to support natural processes, taking into account the need to preserve or restore the appropriate state of conservation.

In accordance with the assumptions adopted in the abovementioned document, the regeneration in the area of the Site will be carried out primarily by using natural regeneration. Artificial regeneration will be applied in particular in the case of to such species as e.g. oak, pine or elm which practically do not regenerate naturally in Białowieża Forest and which need to be part of the species composition in order to ensure the appropriate state of conservation of natural habitats.

It should also be emphasised that artificial regeneration will be introduced only by using a manual soil preparation technique (with no tillage) exclusively on small spots in groups of a dozen or so seedlings. The area between these groups will be left untended to allow natural succession. Seedlings grown from seeds collected in the area of Białowieża Forest are used for artificial regeneration.

In addition, it is informed that with his Decision 89 of 17 May 2018 the Director General of State Forests repealed Decision 51 of the Director General of State Forests of 17 February 2017 imposing on the

Forest Inspectors the obligation to ensure the timely removal of trees infested by bark beetle and the logging of trees posing a danger to public and fire safety in all the age classes of stands in the Białowieża, Browsk and Hajnówka Forest Districts.

### 3. Wood harvesting

In 2017 and 2018, wood harvesting operations were carried out in the part of the Białowieża Forest Transboundary World Heritage Site managed by the Białowieża, Browsk and Hajnówka Forest Districts. The scope of these operations partly included the works planned in the FMP which were carried out in stands younger than 100 years and also measures to ensure public safety.

Tables show the amounts of wood harvested in the individual Forest Districts, by the UNESCO zones.

**Table 7.** Wood harvested ( $m^3$ ) in 2017, by the UNESCO zones and Forest Districts.

Zone	Białowieża Forest District	Hajnówka Forest District	Browsk Forest District
Strict conservation (Zone 0)	-	-	-
Partial conservation (Zone 1)	-	-	-
Partial conservation (Zone 2)	30,848.45	21,661.5	71,442.43
Active conservation (Zone 3)	7,201.35	22,524.96	7,536.09

It should be clarified that in the area of the Hajnówka Forest District harvested 28,011.45  $m^3$ , it was in the buffer zone of the Transboundary World Heritage Site.

**Table 8.** Wood harvested ( $m^3$ ) in 2018 (until 30 June), by the UNESCO zones and Forest Districts.

Zone	Białowieża Forest District	Hajnówka Forest District	Browsk Forest District
Strict conservation (Zone 0)	-	-	-
Partial conservation (Zone 1)	-	-	-
Partial conservation (Zone 2)	-	691.52	-
Active conservation (Zone 3)	-	2,164.16	5.60

The partial protection zone 2 and zone 3 for active protection of biodiversity and landscape were determined on information of species composition and stand age of indicated in the description from the forest inventory. That information determined, whether a forest stand fulfill the criteria indicated in the re-nomination application and was qualified to Partial protection 2 zone.

**Table 9. Wood harvested (m<sup>3</sup>) in 2017 outside the Forest Management Plan**

Zone	Białowieża Forest District	Hajnówka Forest District	Browsk Forest District
Strict conservation (Zone 0)	-	-	-
Partial conservation (Zone 1)	-	-	-
Partial conservation (Zone 2)	71.03	-	-
Active conservation (Zone 3)	-	-	-

Table 9 contained information about the implementation of activities carried out as part of work related to border zone security and activities in the historic "Management Park" in Białowieża subject to heritage protection (a registered monument). These activities were also carried out in 2018, but felled trees were left for natural decomposition.

Since 27 July 2017 until the present time wood has been harvested in the areas of the Browsk, Białowieża and Forest Districts **only** to cut trees which pose a danger to human health and life. Some of the trees cut to ensure public safety are left on a given plot for the purpose of their natural decomposition, whereas the other part of wood must be removed from the stand, among others, for fire protection purposes. The wood transported out of the logging site is subject to recording, in accordance with the Polish law. In such a situation, the manager of the Site pursues a reasonable course of action (in compliance with the law) by selling the wood. The wood originating from the Forest area is sold in accordance with the principles of wood sales in effect at the State Forests National Forest Holding which ensure the transparency of wood trade.

It should be emphasised that in its operations in the zones the Site, manager follow the definitions and conservation regimes laid down in the descriptive part of the nomination document.

#### Demand for fuelwood

In light of the demand for fuelwood reported by the inhabitants of the region of the Białowieża Forest, the Regional Directive of State Forests in Białystok took efforts to ensure access of the local population to broadleaved fuel wood, in accordance with its expectations. The wood was supplied from the areas of Forest Districts situated outside the boundaries of the World Heritage Site. However, this was a non-standard measure, launched to address the urgent problem of providing fuelwood for the winter. On the basis of experiences gained, it should be said that this manner of providing fuelwood to meet the local needs is an ineffective solution which generates high costs and logistics problems. The Integrated Management Plan for the World Heritage Site will include a system for providing the local population with fuelwood originating from the buffer zone and the active protection zone.

In 2017 and 2018, the Forest Districts situated in Białowieża Forest were able to provide only small amounts of fuelwood.

**Table 10. Fuelwood amounts sold by the Forest Districts situated in Białowieża Forest in 2017 and 2018**

Forest District	Fuelwood sold by the Forest District in 2017 (m <sup>3</sup> )	Fuelwood sold by the Forest District in 2018 (m <sup>3</sup> )
Białowieża	2,520.68	1,562.87
Browsk	7,080.97	1,543
Hajnówka	8,324	1,344.67
<b>Total</b>	<b>17,925.65</b>	<b>4,450.54</b>

In addition, the Site manager has data indicating the demand for broadleaved fuelwood from the local governments in the region of Białowieża Forest, which is as follows:

- The Town of Hajnówka – 20,000 m<sup>3</sup>
- The Town of Kleszczele – 10,000 m<sup>3</sup>
- The Commune of Białowieża – 10,000 m<sup>3</sup>
- The Commune of Hajnówka – 15,000 m<sup>3</sup>
- The Commune of Narew – 15,000 m<sup>3</sup>
- The Commune of Narewka – 20,000 m<sup>3</sup>
- The Commune of Czyże – 10,000 m<sup>3</sup>
- The Commune of Dubicze Cerkiewne – 2,500 m<sup>3</sup>
- The Commune of Czeremcha – 5,000 m<sup>3</sup>

#### Wood thefts

In 2017 and 2018, there were several cases of wood thefts in the Forest Districts situated in Białowieża Forest. Detailed data are given in the table below.

**Table 11.** Amounts of wood stolen from the areas of the Forest Districts situated in Białowieża Forest in 2017 and 2018

Forest District	Number of cases	Volume of stolen wood (m <sup>3</sup> )
Białowieża	2	3.04
Browsk	1	0.9
Hajnówka	1	0.79
<b>Total</b>	<b>4</b>	<b>4.73</b>

#### **4. Information on the transboundary cooperation in all fields**

Given their situation on the border, the Forest Districts and the Białowieża National Park stay in constant contact with the manager of the Belarusian part of Białowieża Forest, i.e. the Belovezhskaya Pushcha National Park. In order to exchange good practices related to the preservation and management of the World Heritage Site, meetings of representatives of the managers of the transboundary property are held. They include both working meetings to consider specific issues and study visits to present the specificity of the Site on both sides of the border. As part of the promotion of the World Heritage Site,

both the Polish and Belarusian parts receive delegations consisting of representatives of different communities interested in the issues related to Białowieża Forest.

In order to improve the transboundary tourist traffic in the area of Białowieża Forest, with the resources of State Forests a parking lot was built at the Białowieża – Piererow pedestrian border crossing where tourists can leave their cars and go on foot to the Belarusian part of the Forest.

As they are members of the Steering Committee for the World Heritage property, together with their Belarusian partners, State Forests have begun to prepare an agreement which will enable the elaboration of joint actions to exchange information and knowledge concerning the correct directions of the management of the Site.

## 5. Tourist pressure

The tourism carrying capacity of valuable natural areas (including the pressure exerted by tourists on the environment) depends to a large extent on the degree of development of tourist facilities and the quality of services provided. The tourist sites situated in the area of Białowieża Forest have a large number of natural, cultural and historic values. By attracting huge numbers of tourists the key forest sites provide the basis for tourism in this area. Since the public has free access to the forests administered by the State Forests National Forest Holding, it is difficult to give the number of visitors. However, the estimated data indicate **140,000** persons annually. The statistical data kept on the tourist traffic on the educational path called the Trail of Royal Oak in the area of the Białowieża Forest District indicate that in 2015 it was used by 7,500 visitors, whereas in 2016 their number was almost 16,000 and in 2017 about 19,000 persons (estimated data).

A very large concentration of tourist traffic in a relatively small areas, with its accumulation mainly in the period from the spring to the autumn, exerts a significant impact on its surroundings.

At present, organised tourism forms dominate - school excursions, integration events, symposiums, conferences and training courses, coupled with tourist attractions. Tourism of this type takes place in a controlled manner on the designated tourist trails, educational paths and designated places offering attractions for tourists. However, the individual tourism focused on nature, in particular, on birds, is just as popular. In this case, tourists most often move outside the designated trails to find their "curios".

In order to ensure public safety, the field staff of the Forest Districts control on a current basis the condition of trails and eliminate any threats. This year, together with the County of Hajnówka and the Polish Tourism and Sightseeing Society (PTTK), the Forest Districts situated in Białowieża Forest updated the tourist map showing the accessibility of tourist trails in Białowieża Forest.

### Tourism infrastructure

In the areas of the Forest Districts, there are numerous tourism infrastructure facilities – detailed data are given in the tables below.

Table 12. Types of tourist trails in the areas of the Forest Districts situated in Białowieża Forest

Forest District	Tourist trails in the areas of State Forests					
	Walking	Cycling	On horseback	Cross-country skiing	Nordic walking	Other
	km	km	km	km	km	km
Białowieża	81	23	0	8	53	4.3
Browsk	130.50	70.00	0	20	40.20	39
Hajnówka	60.10	47.60	0	0	38.3	0
Total	271.6	140.6	0	28	131.5	43.3

Table 13. Types of tourism infrastructure

Forest District	Forest-based parking lots		Vehicle stopping sites	
	Number of lots	Number of places	Number of sites	Number of
Białowieża	2	117	7	200
Browsk	1	20	2	30
Hajnówka	2	90	0	0
Total	5	227	9	230

### Littering of the forests

The tourism pressure is accompanied by the littering of the forests. The staff of State Forests take efforts to limit it, together with the other institutions related to the area of Białowieża Forest, e.g. by taking the following actions:

- the Forest Districts continuously cooperate in the scope of forest education with the schools situated within the territorial range of Forest Districts,
- the Forest Districts educate the local population and tourists on the effects of the littering of the forests and support in organisational terms the campaigns launched by the public,
- in cooperation with the local governments, the Forest Districts organise or support the campaigns to clean up the forests and other actions to raise the awareness of the public,
- the managers of the area treat the littering of the forests as a priority problem; therefore, the operations to clean up the forests are a permanent element of the contracts on forest services.

In 2017, as a total, 859 m<sup>3</sup> of waste was removed from the areas of the Forest Districts situated in Białowieża Forest; for comparison, this is equivalent to the contents of about 25 universal containers used in transport.

**Table 14.** Costs and amounts of waste removed from the areas of the Forest Districts situated in Białowieża Forest in 2017 and 2018

Forests District	Volume of removed waste (m <sup>3</sup> )	Costs (PLN thousand)
Białowieża	620	35.2
Browsk	376	19.9
Hajnówka	847	13.4
<b>Total</b>	<b>1,843</b>	<b>68.5</b>

In 2018, given the problems related to the selection of the contractors to provide forest services, to a large extent the waste was removed by the field staff of the Forest Districts.

#### Public safety

All along the public roads, tourist trails and educational paths as well as around vehicle stopping places, ongoing works are carried out to ensure public safety.

Taking into account the report of the 2016 Advisory Mission, due efforts were taken to establish clear technical guidelines for cuttings intended to ensure “public safety”, based on the definition of this term in accordance with the provisions of the law). The national regulations impose on the manager of an area the obligation to ensure safety for persons who sojourn in this area. It is exactly the manager of the area who bears the responsibility for a possible accident and decides to take appropriate measures depending on the specific situation on the ground.

In accordance with the legal interpretation, the concept of public safety “(...) *should be perceived as a specific general clause which continuously needs to be redefined, corresponding to a variable legal, social or environmental context (...)*”.

In order to enhance the transparency of the measures taken, the Director of the Regional Directorate of State Forests appointed an ad hoc advisory team to assess the threat posed to public safety by dead and weakened trees in the areas of the Białowieża, Browsk and Hajnówka Forest Districts. The members of the team include representatives of the District Labour District, the Forest Research Institute, the County Headquarters of the State Fire Service and an expert on occupational safety and hygiene. The tasks of the team include, among others, field inspections and the provision on their basis of opinions regarding the need to take action to eliminate a threat.

In 2017 and 2018 (until 30.06.2018) a total of 33,500 trees were cut and left to decompose naturally in order to ensure public safety. The table below gives the numbers of trees by the Forest Districts.

**Table 15.** *The number of trees cut as part of the measures to ensure public safety*

Forest District	Number of trees cut and left to decompose naturally in 2017 and 2018 (until 30 June)
Białowieża	21,413
Browsk	2150
Hajnówka	10,018
<b>Total</b>	<b>33,581</b>

#### Fire safety

The maintenance of fire safety is an important element from the point of view of the provision of access to forests for tourists and the conservation of forest ecosystems.

The environmental changes in Białowieża Forest caused by the accumulation of large amounts of deadwood resulting from the bark beetle outbreak and the dieback of spruce stands, the unfavourable changes in the water regime and the emergence of large fragments of dead or strongly thinned stands with a grassy cover radically contribute to the growth of the potential fire danger. For the reasons listed above, there is a risk of the outbreak of particularly severe fires with enhanced spread dynamics, which may lead, in consequence, to the occurrence of large-area fires.

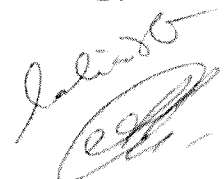
The amount and type of fuel are the basic elements which determine the risk of a fire outbreak and spread, and, in consequence, the extent of damage to the natural environment of the UNESCO World Heritage Site. Dead biomass plays a special role, not only for the fire initiation but also in shaping the conditions for the spread of a fire. The risk of a fire outbreak is defined, among others, by the fire load, i.e. the amount of flammable biomass per unit of surface area (in t/ha).

The smallest fire load could be seen at the beginning of the bark beetle outbreak in 2012, amounting to 23.6 t/ha (before the outbreak this load had been 15.8 t/ha). In successive years, the fire load grew to the level of 60 -70 t/ha, reaching 91 t/ha in 2016 and 107 t/ha in 2017. **The bark beetle outbreak caused a more than a seven-fold increase in the fire load.** Under unfavourable weather conditions, this greatly increases the risk of a fire outbreak with catastrophic impacts on the OUV of the UNESCO Site.

In reference to the above, it should be emphasised that, in accordance with the recommendations of the report of the 2016 Mission, the final work is underway to elaborate "A comprehensive plan for the prevention and extinguishing of forest fires on the World Heritage Site". The document is based on the integration of instructions applied by the individual managers of the area and the detailed guidelines of the County Headquarters of the State Fire Service in Hajnówka. The documents which make up "A comprehensive plan for the prevention (...)" include:

- "The fire protection plan for Białowieża Forest" adopted by Order 25/2018 of the Director of the Regional Directorate of State Forests in Białystok of 14 May 2018,
- The fire protection plan of the BNP,
- "The plan for the prevention and extinguishing of forest fires on the World Heritage property in the area of Białowieża Forest" of the Provincial Headquarters of the State Fire Service in Białystok

The plan was elaborated in cooperation with many experts. Before its final approval it will be subjected to consultations with the participation of a wide range of stakeholders.





In relation to a large threat, posed, among others, by dead trees to the safety of persons who sojourn in the forest and a substantial fire risk, this year the units of State Forests received **11 letters** requesting intervention. The letters were sent by the military (in relation to the threat in the area of the military unit in Hajnówka), the Border Guard (in relation to the increasing threat to its officers working in the field, not only along the border) and the local governments of the Communes situated in Białowieża Forest.

In 2018 (until the middle of September), as many as **10** fires broke out (with a total area of 0.82 ha).

Seeking alternative methods for ensuring public safety, the Forest Districts introduced periodic bans on entry into the forest. Repeatedly, this met with a negative response of the local population, tourists and nongovernmental organizations, thus generating numerous conflict situations. The management plan for the Site will comprehensively address the problems of public safety.

#### **6. The educational activities implemented by the Forest Districts. The number of participants, target groups, topics and types of activities**

##### Forest education

In the scope of forest education, the Forest Districts closely cooperate with educational establishments, the Białowieża National Park, the local governments, scientific institutions, nongovernmental organisations and other institutions.

Given the specificity of Białowieża Forest, the main target groups include the pupils and students of primary schools, gymnasiums and post-gymnasium schools, as well as the students of different universities with a forest profile and those dealing with nature conservation and environmental engineering, also including foreign students. In 2017, an important target group consisted of foresters and naturalists from different regions of Poland and Europe who wished to become acquainted in person with the problem of stand dieback caused by an intensive bark beetle outbreak and the methods applied in the case of Białowieża Forest.

Free educational classes are delivered throughout the year by the staff of the Forest Districts. Every year the classes organised at the education centres of the Forest Districts and in the field are attended by more than **20,000** persons, mainly children and youth.

The education is based on the following thematic blocks:

- “Man in Białowieża Forest” - where the educational objective is to become acquainted with the history of the Forest
- “Wood as a renewable natural resource” - where the educational objective is to become acquainted with the role of trees and wood
- “Nature conservation and environmental protection” - where the educational objective is to become acquainted with the different forms of protection in Białowieża Forest and the threats to the surrounding environment
- “Flora and fauna of Białowieża Forest” - where the educational objective is to become acquainted with the basic species of flora and fauna as well as their interrelationships
- “The forester as a good manager” - where the educational objective is to become acquainted with forestry, its role, history and present time



Examples of the topics of educational classes:

- forms and methods of nature conservation
- the multi-storey structure of the forest
- the identification of native species of trees and shrubs
- the identification of native species of birds
- the protected species of flora and fauna
- the identification of tracks and traces of the presence of forest animals in the winter and summer
- the biology and ecology of amphibians
- the lesser spotted eagle – its biology and conservation as an umbrella species
- the European bison – the king of the Forest – the biology and ecology of the European bison
- the bark beetle outbreak – the causes, course and effects

It should be pointed out that the topics delivered also include the issues related to the Transboundary World Heritage Site Białowieża Forest and the Biosphere Reserve. On 24 October of this year, representatives of the managers of the Polish part of the Site held a working meeting on the adoption of uniform marking and the highlighting of the issues related to the World Heritage Site in educational activities.

**Table 16.** *The number of persons who participated in the educational classes delivered in 2017 by the Forest Districts situated in Białowieża Forest*

Forest District	Number of persons participating in the classes
Białowieża	6,732
Browsk	5,935
Hajnówka	7,360
<b>Total</b>	<b>20,027</b>

**Table 17.** *The number of persons involved in the delivery of educational classes*

Forest District	Number of educators	Other persons involved in forest education
Białowieża	3	22
Browsk	2	24
Hajnówka	2	43
<b>Total</b>	<b>7</b>	<b>89</b>

#### Outreach

As part of the operations of the Forest Districts, they organise or co-organise scientific conferences and symposia on Białowieża Forest. Many events are organized together with the BNP and other partners. The most important of them which were implemented in 2017 are listed below:

- the visit to the Children's Memorial Health Institute,
- the "Birds' Bistro" competition,
- the Night of the Owls,

- the Race “I run because I like forests”,
- the Rally in the Tracks of Nature,
- the 12<sup>th</sup> Eco Olympiad,
- the Ecological Youth Forum,
- the project “Why active conservation makes sense. Passive and active conservation in Białowieża Forest”
- the campaign “Sumer holidays in Białowieża Forest”,
- Borderland Marathons,
- Poland’s Cup in Nordic Walking,
- a forest fair,
- the visit by the participants in the SMOG project,
- the campaign “Feed birds with a forester”,
- the Santa Claus Day for children in the village of Mikłaszewo,
- the Wolf Day,
- the winter holidays at day rooms situated in the area of the Browsk Forest District (Lewkowo Stare, Siemianówka and Narewka),
- the competition “Legends of Mysterious Spots in Białowieża Forest”,
- the competition “Wolf tales”,
- the competition “The forest teaches us”,
- the Independence March,
- the World Environment Day in Białystok,
- the 1<sup>st</sup> Forest Picnic in Hajnówka,
- the Days of Orthodox Church Music.

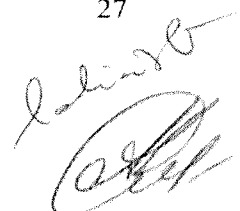
Every year, together with the BNP, State Forests co-organises the international conference “Tourism in Valuable Natural Areas” which is organised by the Białystok University of Technology.

On 22 November 2017, State Forests organised a conference to present **the initial results of the nature and culture inventory of Białowieża Forest**. 474 persons from different scientific and social communities were invited. It should be emphasised that the nongovernmental organisations involved in the conflict about Białowieża Forest did not accept the invitation.

As part of the cooperation with the local governments in the region of Białowieża Forest, on 21 September 2017, State Forests convened a consultation and information meeting on the functioning of the World Heritage Site.

In the area of Białowieża Forest, foresters regularly organise meetings of the Scientific and Social Council of the Białowieża Forest Promotional Forest Complex involving an exchange of views and consultations with scientists and the public on the most important directions of actions to ensure the preservation of the OUV of the World Heritage Site.

As part of cooperation and efforts to improve the communication on the issues related to Białowieża Forest, on 17 May 2018 the Minister of the Environment and the Director General met with representatives of nongovernmental organisations. The aim of the meeting was to initiate a dialogue which



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would be pursued in the atmosphere of respect for the positions of all the parties and to work out solutions for the effective conservation and management of the property.

In the course of the meeting, once again the Minister of the Environment invited the organisations to join the work of the Expert Team established by the Minister of the Environment to prepare the assumptions for the Management Plan for the Site.

In addition, in light of the above, in order to improve communication and unify the directions of measures in the area of Białowieża Forest, the Regional Directorate of State Forests in Białystok launched a project designed mainly to ensure the coordination, communication and integration of all the measures in favour of Białowieża Forest. All the measures will be carried out in strict cooperation with all the stakeholders, taking into account the needs and postulates of the interested parties.

## **7. Cultural aspects**

Białowieża Forest is an outstanding example of traditional settlement and traditional forest use, representative of the Polish, Lithuanian and Belarusian borderlands. It illustrates a human interaction with the natural environment, consisting in the moderate use of natural resources and sustainable development. This was a kind of use which enabled a relatively small human population to survive in these exceptionally difficult climate conditions. The Forest resources were not subject to intensive commercial trading; nor did they provide the basis for the development of industry which would have led to the destruction of these resources. Although short periods of intensive, indeed robber-like, wood extraction left a permanent trace in the Forest ecosystems, still they never broke the continuity of its natural processes.

The area of Białowieża Forest has ample sites of material culture, which are the remnants from the rich history of this part of Poland, where the influences and cultures of different nations interacted for centuries. Unfortunately, as a result of its turbulent history, particularly the national uprisings, wars and the transfers of the Forest between different parties, very many valuable monuments of architecture did not survive until the contemporary times (their prime example is the hunting palace of Tsar Nicholas II from 1894).

As part of support for the traditions related to domestic beekeeping, the Forest Districts make forest areas available with no charge for setting up apiaries. To date, in the areas of the Forest Districts beehives have been set up. The principles of the setting up of beehives are regulated by the agreement between the Forest Districts and the Association of the Beekeepers of the Białowieża Forest Region.

### Archaeological sites

The largest group of archaeological sites in the area of Białowieża Forest consists of barrow cemeteries from the early medieval times. Excavation works have revealed that they include both skeleton and cremation burials. They are dated from the 10<sup>th</sup> century to the mid-13<sup>th</sup> century and attributed to Ruthenian settlement.

According to scientists, the presence of 88 barrow sites with 542 barrows has been documented in the Polish part of Białowieża Forest. According to other sources, in the area of the Białowieża National Park there are 30 barrow cemetery sites with 184 burials. The results of the inventory of the barrows carried out

in 1996 on commission from the Regional Branch of the Monument Protection Service in Białystok are given below:

**Table 18.** *The number of sites and barrows found in the areas of the Forest Districts situated in Białowieża Forest*

Forest District	Number of sites	Number of barrows
Białowieża	22	85
Browsk	30	196
Hajnówka	5	130
<b>Total</b>	<b>57</b>	<b>411</b>

It should be noted that, as part of the *Inventory of the natural riches of Białowieża Forest*, verification works are underway to localise the potential archaeological sites.

#### Cemeteries and national memorials

The cemetery in Białowieża was established in the second half of the 18th century. At present, it is ecumenical. The oldest graves preserved in the cemetery come from the 1860s. The older part of the cemetery is overgrown with trees.

#### Practical vocational education

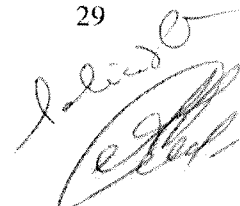
The State Foresters School in Białowieża was founded in 1929 and, subsequently, after World War Two it was re-established in 1951 as the Forestry Secondary Technical School in Białowieża. The number of students involved in the practical vocational education in the Białowieża Forest District was as follows:

- the school year 2015/2016 – 202 students
- the school year 2016/2017 – 193 students
- the school year 2017/2018 – 189 students

A problem in students' work placements in recent years are the much limited opportunities for doing typical forestry tasks; as a result, in order to become acquainted with their specificity, students have to travel to the Bielsk Forest District in Bielsk Podlaski.

### **8. The monitoring of the current state of the environment and nature by the field services of the Forest Districts (The Order of the Director of the Regional Directorate of State Forests in Białystok)**

The monitoring of the natural environment, in particular, of sites covered by different forms of conservation, is part of the forest management which is carried out on an ongoing basis by the staff of the Forest Districts. The collected information is used to supplement the database on valuable natural sites. Data are also acquired from external sources, such as the results of surveys performed by scientific institutions, universities and nongovernmental organisations. The purpose of the monitoring is to gain the best possible knowledge of the natural resources in forests. Using the collected information, it is possible to effectively manage the World Heritage Site.



The monitoring is carried out in accordance with the guidelines for the nature conservation procedure laid down in Part IV of the Forest Protection Instructions and Order 16 of the Director of the Regional Directorate of State Forests in Białystok of 29 April 2014 on the nature monitoring procedure and the assessment of the impact of forest management operations on the biodiversity in forests as amended by Order 1 of the Director of the Regional Directorate of State Forests of 23 January 2015.

#### Regeneration works

In 2017 and 2018, a total of 63.07 ha of forests was regenerated on the Transboundary World Heritage Site Białowieża Forest.

A list of areas subjected to regeneration shown below.

**Table 19.** Forest regeneration in 2017 and 2018 – the partial conservation zone 2

Zone (according to the criteria described in the nomination application)	Zone according to the map	Forest District	Forest compartment	Surface area subjected to the measure (ha)
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	338B-c	0.21
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	312D-c	0.25
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	216B-a	0.24
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	280D-a	3.38
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	249D-a	0.38
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	394A-a	0.7
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	367A-n	0.85
Active conservation zone 3	Partial conservation (Zone 2)	Białowieża	367A-l	0.8
Active conservation zone 3	Partial conservation (Zone 2)	Browsk	102C-f	1.1
Active conservation zone 3	Partial conservation (Zone 2)	Browsk	781A-f	2.00
Active conservation zone 3	Partial conservation (Zone 2)	Hajnówka	668C-d	0.68
Active conservation zone 3	Partial conservation (Zone 2)	Hajnówka	668C-g	1.84
Active conservation	Partial conservation	Hajnówka	701A-a	2.5

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zone 3	(Zone 2)			
Active conservation zone 3	Partial conservation (Zone 2)	Hajnówka	212C-f	1.37
Active conservation zone 3	Partial conservation (Zone 2)	Hajnówka	385D-a	0.76
Active conservation zone 3	Partial conservation (Zone 2)	Hajnówka	701A-f	0.17
	<b>TOTAL:</b>			<b>17.23</b>

### Investment projects

#### **The Narewowska road**

On the initiative of the local community, the Białowieża and Browsk Forest Districts began to implement an investment project consisting in the reconstruction of the Narewowska forest road. The investment project is supported by the inhabitants of the region, as expressed e.g. in the position of the Council of the County of Hajnówka, adopted by Resolution XXXI/312/18 of 28 June 2018, as well as a bottom-up initiative for collecting residents' signatures under a petition addressed to the Minister of the Environment and containing a request for support for the implementation of the investment project. A positive opinion on the repair of the road was also expressed by the Management of the Białowieża National Park and the Councils of the Communes of Białowieża and Narewka.

The investment project was subjected to an environmental impact assessment, in accordance with the provisions of the Act of 3 October 2008 on the Provision of Information on the Environment and Its Protection, Public Participation in Environmental Protection and Environmental Impact Assessments (Official Journal of the Laws of 2018, Item 2081). Detailed information on the environmental impact assessment, including the impact on the OUV, was provided to the experts who participated in the Reactive Monitoring Mission to the World Heritage Site.

The investment project was subjected to wide public consultations. At the stage of the issue of a decision on the environmental conditions, all the interested parties could submit their comments and applications concerning the proposed works. At that time no comments were submitted by any organisation which now protests against the modernisation of the road.

The Narewowska forest road runs from the provincial road No. 689 between Białowieża and Hajnówka to the village of Janowo in the Commune of Narewka. It is the main tourist route for both car and cycling traffic. The Green Velo East of Poland Cycling Trail, the most popular cycling route in Poland, runs on it. The Narewowska road goes through the area of Białowieża Forest which is situated outside of the strict protection zone. This means that, in terms of the conservation of the World Heritage Site, the modernisation of roads to ensure their proper technical condition is allowed at a given location.

The reconstruction of the forest road consists in the improvement of its construction and the implementation of its surface from a cold mineral and emulsion mixture in **the existing road belt**. The adopted technology is neutral to the environment. The aim of the implementation of the investment project is to adapt the technical parameters of the road to the recreation and tourist traffic and to improve the

quality of the tourist offer, in accordance with the expectations of the present-day tourists. **There is no plan to widen the road belt or build road shoulders.** The **speed limit of 30 km/h** will be imposed, reducing the risk of vehicle collisions with animals. Currently, permanent traffic organization project is developing for the Narewowska road. It will include vertical road signs introducing the traffic rules such as speed limit, warning signs, etc.

As a result of complaints of nongovernmental organisations and the need to submit explanations to the European Commission, the deadline for the completion of the investment project was postponed to 2019. This will cause further difficulties for tourist traffic.

The advancement of the investment project to reconstruct the Narewowska road is as follows: in the area of the Browsk Forest District the modernisation works have been completed over a road section of about 6.3 km, while over the other section, in the area of the Białowieża Forest District, works are continued.

#### **Joint road investment projects**

Local public roads are an important element of the development of the region. State Forests became involved in the development of road infrastructure by co-financing the key investment projects:

- in 2016 – 7 investment projects co-financed with PLN **3.8** million;
- in 2017 – 12 investment projects co-financed with PLN **9.4** million;
- proposed for 2018 – 3 investment projects to be co-financed with PLN **15.5** million.

In 2017, the Browsk Forest District implemented joint investment projects with the Commune of Narew. These projects included the repair of the road in Gramotne. In 2018, together with the Communes of Narewka and Hajnówka, State Forests will carry out investment projects to repair the Olchówka – Masiewo road and the one in Borysówka.

In 2017, the Białowieża Forest District implemented joint investment projects with the Commune of Białowieża. These projects included the repairs of two streets in Białowieża. As part of the investment projects, new road surface bases and surfaces as well as new pavements and driveways were built. The total amount of resources allocated from the Forest Fund to the implementation of these investment projects slightly exceeded PLN 634,000.

#### **Other infrastructural investment projects**

In 2017, the Białowieża Forest District completed the first stage of works to revitalise the historic Management Palace in Białowieża. As part of these works, the surface of some of the park alleys was upgraded (asphalt was replaced by Hanse-Grand type aggregate), the lighting of these alleys was also replaced, benches and waste bins were prepared and installed, and so were the racks for education and information boards.



Moreover, in 2017 new education boards were set up on the "Białowieża Forest Landscapes" educational path.

In the area of the Hajnówka Forest District, the following investment projects were implemented:

- the tracks of the narrow-gauge railway from Hajnówka to Topiło were repaired and upgraded,
- the reconstruction of the rail engine shed was completed,
- the tourist shelter in Topiło was modernised,
- the tourist shelter in Postołowo was modernised and its area was developed,
- the narrow-gauge rolling stock was revitalised,
- a permanent exhibition was set up near the garage of the narrow-gauge railway,
- the educational walkway was modernised in the Czerlonka Forest Sub-District,
- the fire protection watchtower was built in the Czerlonka Forest Sub-District,
- the bridge across the Leśna River was reconstructed.

The following projects were proposed for implementation in the area of the Hajnówka Forest District:

- the reconstruction of the administrative and social building in a forest nursery,
- the reconstruction of the Łozice-Topiło road,
- the Educational Centre in Topiło.

In the area of the Hajnówka Forest District, joint investment projects were implemented together with the local governments:

- the reconstruction of the Starzyna - Górny Gród road,
- the reconstruction of Celna Street in Hajnówka,
- the reconstruction of the Sosnówka-Orzeszkowo road,
- the reconstruction of the Wiluki – Kragłe road.

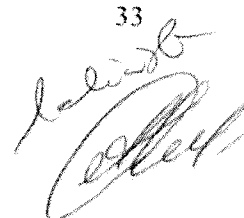
Stage II of the reconstruction of Celna Street in Hajnówka is underway.

In the required cases, an environmental impact assessment will be performed for proposed investment projects. In Polish legislation, the principles of the performance of environmental impact assessments are laid down by the Act of 3 October 2008 on the Provision of Information on the Environment and Its Protection, Public Participation in Environmental Protection and Environmental Impact Assessments (Official Journal of the Laws of 2018, Item 2081) which implemented into Polish law, among others, Article 6(3) of the Habitats Directive.

Moreover, all the major investment project proposed for implementation in the area of the World Heritage Site will be consulted with the UNESCO Committee to determine the need for performing an assessment of the impact on the OUV.

### **3.3 Belovezhskaya Pushcha National Park (Belarus)**

The forest management in the Belarusian part of the World Heritage Site is aimed at ensuring fire safety and health risk management. The following logging types are implemented: clearance of compartment lines and felling of dangerous trees are carried out throughout the territory of the World Heritage Site, leaving wood in place in the territory of the strict reserve and areas with a special protection regime.



The forest logging in the Belarusian part of the World Heritage Site in 2018 was implemented in 1,641 ha with 40,704 m<sup>3</sup> cut. The cutting was implemented in zones 0, 1, 2 and 3, but harvested wood was removed only from zone 3 – the amount of wood removed from the Site during 2018 was 22,835 m<sup>3</sup>.

The activities inside zones 0,1 and 2 were carried out in a 30-meter belt along the roads and other routes for public safety and all felled trees were left on site.

No artificial forest regeneration (forest planting) was implemented within the Belarusian part of the World Heritage Site in 2018.

In 2018, 1 forest fire was registered, which affected 3 ha of the World Heritage Site territory. The fire was extinguished. In addition, 134 ha were damaged by windfall.

An inventory of the distribution of alien invasive plant species in the territory of the National Park was carried out in 2018. In the territory of the World Heritage Site, the area in which these species are distributed (the Sosnowsky's hogweed (*Heracleum sosnowskyi*) and the Canadian goldenrod (*Solidago canadensis*)) amounted to 11.7 ha, and in the territory of the buffer zone - 225 ha. Measures have been taken to eliminate these species - first of all, manual and mechanical mowing, as well as disking of soil on former agricultural land.

Data on recreational activity on the territory of the Belarusian part of the World Heritage Site: the number of visitors to the National Park in 2017 was about 460,000, but most of them visited the Museum of Nature and animal demonstration enclosures, which are located in the buffer zone of the World Heritage Site. The number of visitors on hiking and cycling tourist routes inside the World Heritage Site area in 2017 is estimated at 35,000.

#### Research and conservation

According to the approved thematic research plan for 2017–2018 on the topic “Scientific support of environmental activities and sustainable resource management of Belovezhskaya Pushcha” (2016–2020), fourteen sections are carried out:

- Study of the features of succession and demutation processes in forest formations with different protection regimes of natural complexes.
- Assessment of the current state and long-term dynamics of wild ungulates, including the population of the European bison in Belovezhskaya Pushcha.
- Study of species diversity and patterns of structural organization of communities of double nesting birds in the forest ecosystems of Belovezhskaya Pushcha.
- Study of the influence of economic activity in the territory of Belovezhskaya Pushcha on the condition of the beetle populations included in the Red Data Book of the Republic of Belarus.
- Listing, determining the location and areas of typical and rare biotopes of the National Park.
- Creation and updating of the server database for systematization and rapid accumulation of information on the biota of the National Park.
- Development of practical recommendations for the improvement and development of ecotourism.
- Population-biological features of rare plant species and measures for their conservation.
- Development of a scheme for the restoration successions of native forest vegetation in areas of windfalls with various types of sanitary and recreational activities.
- Updating the data on the invertebrate fauna of Belovezhskaya Pushcha with the preparation and publication of a series of monographs.
- Creation of an atlas of digital thematic maps of the current state of biodiversity of the National Park and a manuscript layout of the book “Vegetation and biotopes of Belovezhskaya Pushcha”.
- Inventory of material objects of the historical and cultural landscape of Belovezhskaya Pushcha.

- Study of the species composition of aphylophoric, agaricoid, and gasteroidal basidiomycetes of Belovezhskaya Pushcha National Park.
- Study of the effect of conducting intensive hunting and breeding in the hunting area of the Pashukovsky Forest Sub-District on the processes of natural regeneration in order to determine the optimal number of wild ungulates.
- Dynamics of processes and phenomena in natural complexes of Belovezhskaya Pushcha (Chronicle of Nature).

As part of the activities of the state program "Environmental Protection and Sustainable Use of Natural Resources", researches on the following topics were carried out:

- Creation of breeding and genetic sites and the formation of sites of the permanent forest seed base of pine, oak, taking into account the phenotypic variability of populations.
- Development of a scientific rationale for the restoration of the damaged Popelevo swamp ecological system in the National Park "Belovezhskaya Pushcha".

In addition, the following studies within the framework of cooperation with the NGO APB-BirdLife Belarus and Frankfurt zoological society were carried out:

- Impact of the conservation regime and limited economic activity on the ecology of the wolf in the conditions of Belovezhskaya Pushcha.
- Assessment of the impact of the protection regime on forest regeneration and interaction in the "forest-ungulate" system using the example of the spruce forests of Belovezhskaya Pushcha at the terminal stage.
- Assessment of the current state and development of a forecast for the dynamics of the vegetation of model mires (Dikoe, Dikij Nikor) of the Belovezhskaya Pushcha National Park.
- Mapping of aquatic and coastal aquatic vegetation of the Solomenka River for the organization of monitoring observations and evaluation of the effectiveness of measures for the return of the river to the natural course.
- Development of recommendations for the fight against red oak in Belovezhskaya Pushcha.
- Development of a scientific substantiation for the restoration of the natural bed of the canalized section of the Solomenka River.

Polish and Belarusian National Parks and scientific organizations prepared and submitted a joint EU LIFE+ application, aimed at development of transboundary monitoring network (hydrology, vegetation, fauna and flora).

In Belarus, in 2017–2018, the following measures to restore the hydrological regime in disturbed areas in the territory of the buffer zone of the World Heritage Site were taken: rewetting of 1,240 hectares of the Dziki Nikor drained fen mire and rewetting of 314 hectares of the drained lowland swamp near the village of Popelevo.

Preparatory works for the restoration of the hydrological regime of natural fen mire Dzikoje (Ramsar site, IBA), located in the buffer zone of the World Heritage Site were also implemented. In particular, the design and estimate documentation for restoration works was prepared.

4. **In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other area, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.**


Not applicable

**5. Public access to the state of conservation report**

The State Parties express their consent to the publication of the full version of the report.

[Note: *this report will be uploaded for public access on the World Heritage Centre's State of Conservation Information System (<http://whc.unesco.org/en/soc>). Should your State Party request that the full report should not be uploaded, only the 1-page executive summary provided in point 1 above should be uploaded for public access)]*

**6. Signature of the Authorities**



.....  
**Malgorzata Golińska**  
**Secretary of State**  
**Ministry of the Environment**  
**Republic of Poland**



.....  
**Aleksandr Korbut**  
**Deputy Minister**  
**Ministry of Natural Resources**  
**and Environmental Protection**  
**Republic of Belarus**