

## **Report on the conservation status of World Heritage Site “Białowieża Forest”**

### **1. Summary of the report**

Poland, as a Party to the Convention, has warmly welcomed Decision 44 COM 7B.100 of the World Heritage Committee, adopted at its 44th meeting (Fuzhou, China, 2021), concerning the World Heritage Site "Białowieża Forest". Referring to the provisions of the Decision imposing certain obligations on Poland, I submit information on the progress of implementation of the Decision and on the state of protection of the Site.

As it results from Decision 44 COM 7B.100 all provisions resulting from the previous Decision 43 COM 7B.14 are implemented. All provisions arising from Decision 44 COM 7B.100 are also implemented. Poland is taking steps to develop a comprehensive management plan for the Polish part of the Białowieża Forest World Heritage Site, hereinafter also referred to as the "Site". According to a communication from the Ministry of Climate and Environment dated 25 August 2021. Poland signed

24 August 2021 an agreement concerning the work on the management plan for the Białowieża Forest as a UNESCO World Heritage Site.

Recognising the risk of fires in the forest areas of the Site, the managers of the Site on the Polish side started, in accordance with UNESCO's recommendations, to prepare a *Plan for Fire Protection and Forest Fire Suppression for the Polish part of the Białowieża Forest Transboundary World Heritage Site*.

In December 2019, the first version of the above-mentioned plan was presented. Currently, the draft plan and the forecast of the impact of this plan on the environment are subject to public consultations.

Work has started on forest management plans for the Białowieża, Browsk and Hajnówka Forest Divisions, which will be "technical documents" necessary for the implementation of, inter alia, security measures and planned protection activities indicated in the plan of protection tasks

The managers continued their dialogue with stakeholders on issues related to the Białowieża Forest. Cyclical expert meetings are organised on issues concerning the protection, safety, care and conservation of the Białowieża Forest, as well as tourism and economy

The organisation of the meetings is a response to the postulates of various circles involved in the Białowieża Forest concerning the need for talks and counteracting harmful disinformation that causes social conflicts. All stakeholder groups are invited to the meetings, but not all organisations take up the invitation. The participants of the Expert Meetings prepared and then submitted to the Ministry of Climate and Environment their postulates regarding the management of the Site together with the draft zoning update. Taking into account the results of the work of the Expert Team, the State Forest Holding prepared its own proposal for zoning changes, which is in line with the conclusions presented during the 2018 UNESCO/IUCN mission.

Since August 2021, Belarusian state services have been bringing groups of thousands of migrants from the Middle East into the direct border zone with Poland, in the Białowieża Forest property area, and forcing them to illegally cross the Polish state border, causing a serious threat to the security of the Polish state. As a result, the Polish Government and Parliament decided that a dam must be built along the state border with the Republic of Belarus.

## **Recommendations resulting from Decisions 44 COM 7B.100 and 43 COM 7B. 14 of the World Heritage Committee and information on the implementation of the recommendations**

### **1.1. Ministry of Climate and Environment**

In connection with the recommendation of UNESCO to accelerate the work on the management plan (**point 5 of Decision 44 COM 7B.100**), the Polish Party informs that the work on the management plan is given priority. Already in 2019, on the initiative of the Chief Conservator of Nature, a working team was set up to work out, from the technical side, how to achieve the objective, based on the current available knowledge and experience of the advisory organisations to UNESCO, as well as the managers of the World Heritage Sites. One of the activities was the analysis of selected and existing management plans for natural and natural-cultural World Heritage Sites.

In addition, the team for the Białowieża Forest, established by the order of the Minister of Climate and Environment of 18 March 2021, coordinated activities in the Ministry of Climate and Environment and in bodies and units subordinate to the Minister and supervised by him, the result of which was the signing of an agreement on 24 August 2021 concerning the work on the management plan for the Polish part of the UNESCO World Heritage Site between the Institute of Environmental Protection-State Research Institute and the National Fund for Environmental Protection and Water Management. The document under development will define the management methods resulting from the specificity of the Białowieża Primeval Forest site and provide a coherent strategy for the use and presentation of this UNESCO World Heritage Site.

The management plan will be developed in accordance with UNESCO requirements. The work on the plan envisages cooperation with all stakeholders, in particular public administration units, local governments, the public and NGOs, based on the defined roles of each party.

As the activities on the management plan will simultaneously involve communication and education activities targeting different age, social and professional groups, it is anticipated that the project should be completed in March 2023.

### **1.2. Białowieża National Park (BPN)**

The recommendations contained in Decision 44 COM 7B.100 do not apply to the area managed by the Białowieża National Park. BPN is included in the development of a comprehensive management plan for the Polish part of the World Heritage Site "Białowieża Forest".

### **1.3. State Forest Enterprise**

Following the recommendations indicated in paragraphs 5 and 6 of Decision 43 COM 7B.14 and the information indicated in paragraphs 3 and 4 of Decision 44 COM 7B.100, the Polish Party on 9 March 2021 approved the annexes to the Forest Management Plans (FMP) for the Białowieża and Browsk Forest Districts. The adopted documents are in line with the 2018 mission recommendation and allow only limited forest management activities in the active management zone in terms of necessary safety measures and measures needed to implement Natura 2000 requirements. Before approval, the Polish Party submitted the draft plans together with the OUV impact assessment to the UNESCO Secretariat.

As of 9 March 2021, the 2016 annex to the forest management plan for the Białowieża Forest District formally ceased to function in legal circulation.

As a result of the legal obligation to ensure safety on forest managed land, an ongoing assessment of the risk of danger to forest dwellers is carried out. According to national legislation, access to forest areas not covered by a national park or nature reserve is unrestricted for the public, with specific exceptions. This means that it is permissible for people to move through the forest not only on designated roads.

As a result of this and the ongoing bark beetle infestation, which has resulted in the accumulation of significant amounts of dead trees, forest districts have identified real risks of loss of health and life from falling dead trees and the occurrence of forest fires. The managers, bearing full responsibility for the life and health of people staying in the Białowieża Forest area, are obliged to take all measures to eliminate or reduce risks.

One of the measures that managers had to take in these circumstances was to introduce periodic bans on entering the forest in areas where there was a particularly high risk of dead or dying trees, mainly spruce, falling over. This is a highly controversial solution for the local population as it restricts tourist activities and the accessibility of the forest to the local community. Exempted from the prohibitions is being on hiking trails and main roads, where active measures are being taken to ensure safety. In places identified as areas of increased risk, i.e. along public roads and other important traffic routes, such as fire access and hiking routes, car parks and in places frequented by tourists, trees that pose a real risk are felled within 50 metres. Assessment of hazardous trees is carried out by forest district staff as part of their daily duties while patrolling the area. They are supported by an advisory team appointed by the Director of the Regional Directorate of State Forests in Białystok by Decision No. 74 of 2 August 2017 (as amended). In addition, a staff qualification course on identifying tree health and assessing safety risks around trees was piloted in autumn 2019.

The number of trees felled along roads and trails is shown in the table below.

**Table 1. Number of trees removed along roads and trails (in pcs.) between 01/10/2019 and 30/09/2021 by forest inspectorate.**

<b>Forest Inspectorate</b>	<b>Number of trees removed along roads and trails field surveys (pcs.)</b>	<b>Information on surveys by the advisory team</b>
<b>Białowieża</b>	19 904	5 field surveys
<b>Hajnówka</b>	37 057	5 field surveys
<b>Browsk</b>	16 090	4 field surveys
<b>Total</b>	73 051	

*Source: Regional Directorate of State Forests in Białystok*

All trees threatening safety in the partial protection zone were felled and left in the forest to decompose naturally (there is no strict protection zone in the forest districts).



**Photo 1. Threat of dead trees on a tourist route (photo Marcin Kliszcz Forest Inspectorate Browsk)**

In the period in question, since the last report, i.e. from 1 October 2019 to 30 September 2021, no timber harvesting works were carried out in the Białowieża Forest Inspectorate. In Browsk and Hajnówka Forest Inspectorates, forest management activities consisting in timber harvesting and export took place only in the active zone and in the buffer zone - outside the UNESCO area. All works were connected with the necessity to ensure safety and implementation of actions specified in binding plans: the plan of protection tasks for the Natura 2000 area of the Białowieża Primeval Forest and the forest management plan in the scope of forest ecosystem naturalisation. The amount of timber harvested in forest inspectorates by UNESCO zone is shown in the table below.

**Table 2. Timber harvest [m3] from 01/10/2019 to 30/09/2021 by UNESCO zone and forest inspectorate.**

<b>Zone</b>	<b>Białowieża Forest Inspectorate</b>	<b>Hajnówka Forest Inspectorate</b>	<b>Browsk Forest Inspectorate</b>	<b>Total</b>
strict (zone 0)	0	0	0	0
partial I (zone 1)	0	0	0	0
partial II (zone 2)	0	0	0	0
active (zone 3)	0	67.02	1832.76	1899.78

buffer	0	0	615.47	615.47
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Source: Regional Directorate of State Forests in Białystok

In the active protection zone and in the buffer zone, the forest districts undertake actions related to accelerating the forest conversion towards a species composition appropriate for the forest habitats.

In the Hajnówka Forest Inspectorate in the discussed period, 7.7 ha of natural regeneration were recognised in the active and buffer zone, while 26.95 ha were artificially regenerated.

In the Białowieża Forest Inspectorate, 5.96 ha of natural regeneration were recognised in 2020, including 2.00 ha in the partial protection zone II and 3.96 ha in the active protection zone. Artificial restoration was also carried out in the active protection zone - 8.80 ha in 2020 and 1.90 ha in 2021.

In the Browsk Forest Inspectorate, 2.38 ha of natural regeneration and 1.4 ha of artificial regeneration were recognised in the active protection zone; 3.69 ha of natural regeneration and 0.72 ha of artificial regeneration were recognised in the buffer zone, while 5.74 ha of natural regeneration were recognised in the partial zone II.

When carrying out artificial restoration, species compositions were used that corresponded to soil and habitat conditions, and the method of planting was to a large extent similar to natural restoration. As part of the implementation of the above measures, a group method of oak restoration was used.

In connection with the recommendation indicated in point 6 of Decision 44 COM 7B.100, Poland informs that the forest management plans for the forest inspectorates: Białowieża, Browsk and Hajnówka for the period 2022-2031 are prepared in accordance with the recommendations of experts from the 2018 Reactive Mission. The process of preparing draft documents is carried out in accordance with national regulations, including with regard to carrying out an environmental impact assessment of the proposed projects. An impact assessment of the planned activities on the Outstanding Universal Value (OUV) of the UNESCO World Heritage Site Białowieża Forest will be carried out.

It should be noted that the draft forest management plans for the districts will be prepared on the basis of an actual risk assessment to be carried out by foresters in the course of their official duties. The actual risk assessment is an activity carried out systematically by the forest inspectorate services. In its daily work on a continuous basis, the Forest Service assesses the threats affecting the Białowieża Forest. Risks associated with environmental change and climate change are assessed, as well as risks associated with human activity and animal habitation.

In accordance with Recommendation No. 2 of the IUCN Mission Report to UNESCO (the provisions of the Decision were approved in Baku on 03.08.2019), by the decision of the Director of the Regional Directorate of State Forests in Białystok, the Unified Risk Management Plan will be based on international standards for risk analysis, and the implementation of such plan has been entrusted to an external expert.

With reference to the recommendation indicated in paragraph **11 of Decision 44 COM 7B.100**, Poland informs that in relation to the Narewowska road, work is ongoing to monitor the effects of the use of the road after rehabilitation (potential increase of traffic).

The Narewowska road is an important section of the Green Velo trail running through eastern Poland. The completion of the renovation of the road has improved the safety and comfort of its use by cyclists and it can now be said that this road is a key road in terms of cycling tourism in the Białowieża Forest. The observations show that on the modernised Narewowska road, despite the improvement of technical and usage parameters of the road, no significant increase in traffic volume or speed of vehicle movement is recorded (the limit of permissible speed on the entire length of the road is 30 km/h). In order to more accurately monitor the traffic volume on the road, the ECO - Counter system device was set up from 01.10.2021.

No collisions with wildlife were recorded by the forest inspectorate services during the study period.

During the amphibian migration periods, the forest inspectorate services have not recorded any mass mortality among the representatives of this animal group on the Narewowska road.

## **2. Other current condition-related issues identified by the State/Party that may affect the Outstanding Universal Value of the site**

Since August 2021, Belarusian state services have been bringing groups of thousands of migrants from the Middle East into the direct border zone with Poland, in the Białowieża Forest property area, and forcing them to illegally cross the Polish state border. This poses a serious threat to the security of the state and the World Heritage Site "Białowieża Forest".

As a result, the Polish Government and Parliament decided that a dam must be built along the state border with the Republic of Belarus. The planned construction of the border barrier will be implemented in accordance with the Act of 29 October 2021 on the construction of state border security (Journal of Laws of 2021, item 1992). The law provides for the establishment of a Team for the preparation and implementation of state border security, whose tasks include monitoring and evaluation of the implementation of this investment. The Minister responsible for the environment or his/her authorised Secretary of State or Under-Secretary of State shall be represented in the Team. The team, at the request of the Chief Commander of the Border Guard, shall provide support in connection with the implementation of the investment, including through possible minimisation of environmental risks. It should be stressed that environmental issues, including the welfare of animals and especially their migration needs, will be taken into account in the project and this is reflected in the aforementioned law. Particular attention during the implementation of the project will be paid to border protected areas, and in particular to the transboundary World Heritage Site "Białowieża Forest" and the Białowieża National Park located within its borders.

Referring to the current situation on the border, it should be emphasised that the Border Guard cooperates on an ongoing basis with nature protection services - the Regional Directorate for Environmental Protection in Białystok and the Białowieża National Park - in order to limit the negative effects of temporary existing dams on animal populations. This cooperation aims, among other things, to safeguard animals in the border area. Currently, open spaces are left in the fence at local migration corridors to ensure that animals can move.

**The dam being built by Poland on the Polish-Belarusian border is intended to strengthen the country's security while respecting the interests of nature. In order to take care of the migration needs of wildlife, it will be equipped with special animal crossings to eliminate the barrier effect and the watercourses will not be fenced.**

## **3. Białowieża National Park**

### **1. Implementation of protective measures resulting from the protection plan of the Białowieża National Park.**

Białowieża National Park implemented protection activities included in the protection plan. During the years 2019 (from October) - 2021 (until the end of September), activities were implemented:

- 1) maintenance of non-forest ecosystems (mowing with removal of biomass) to maintain the feeding base of large herbivores and to improve living conditions for other animal and plant species. In 2020, 135 ha were mown, yielding 47 tonnes of hay and 94 tonnes of haylage;

in 2021, 126 ha were mown, yielding 64 tonnes of hay and 75 tonnes of haylage. 104 tonnes of hay and 108 tonnes of haylage were bought from external suppliers. The whole was used to supplement natural feed deficiencies of animals in free-range and confined flocks;

- 2) removal of foreign species from forest ecosystems: performed in 2020 on an area of 12.16 ha, and in 2021 on an area of 11.67 ha;
- 3) activities for the protection of the European bison:
  - winter feeding sites were maintained in an appropriate sanitary condition,
  - within the framework of winter feeding of European bison, food was distributed in 19 places, in the quantity indicated in point 1;
- 4) there is a European Bison Breeding Centre, where a small population of bison (around 30 specimens) is kept, representing a specific resource of animals with known genetic features, in case of extinction of the bison population living in free roaming herds;
- 5) The staff of the Białowieża National Park conducted monitoring of the number and health control of the bison herds living in captivity and in the wild, and if necessary, elimination of the bison. Bison eradications, carried out by the Białowieża National Park, take place on the basis of permits (decisions) issued by the Minister of Climate and Environment (MKiŚ) in the area of the Białowieża National Park and the General Director of Environmental Protection (GDOŚ) in the Natura 2000 area of the Białowieża Primeval Forest. Decisions of MKiŚ and GDOŚ the number of bison and conditions of the eradication as well as the area (place) where the eradication is to be carried out. According to the decisions, the elimination of bison was allowed:
  - a) seriously ill (an incurable disease that prevents an individual from functioning properly in the environment, including infectious diseases that pose an epizootic hazard),
  - b) seriously injured or suffering drastically as a result of illness or post-traumatic injury,
  - c) aggressive, threatening the life or health of humans or animals.

Bison for elimination are selected based on own observations of Park's employees and external notifications, by a Park veterinarian and the head of the Bison Breeding Centre (OHŻ). Eradication is carried out by shooting using hunting weapons by a licensed person appointed by the director of the Białowieża National Park or by using pharmacological agents by a veterinarian. An employee of the European Bison Breeding Centre and a veterinarian take part in each elimination. Each killed bison is examined by a veterinarian (in particular for the presence of bovine tuberculosis and, recently, also for telasis), who draws up an autopsy report containing data on the bison (age, sex, registration or pedigree number), the reason for elimination, information on pathological changes along with photographic documentation. The minutes, together with a report on the implementation of the decision, shall be forwarded to the issuing authority. In the course of bison autopsy, the scientific centres concerned, with the appropriate permits, take material from killed bison for research.

**Table 3. Data on bison eliminations performed by BPN in the period 1.10.2019-30.09.2021**

Type of breeding	Decision (permit) number	Number of eliminated bison	Reason for elimination	Method of elimination
Closed breeding	DOP-WPN.286.344.2018	1 male (M13801 POGROMCA)	Posthitis	culling
	DOP-WPN.436.203.2019	1 female (F 10166 POWIKA)	neosporosis	pharmacological elimination

Free breeding	DZP-WG.6401.06.13.2018.bp	6 (5 males, 1 female)	<ul style="list-style-type: none"> <li>lagging at the site of finding, unresponsiveness on significant human approach 2 (1, 1)</li> <li>extensive skin lesions 2 (2, 0)</li> <li>Posthitis 1 (1, 0)</li> <li>injury (scapula fracture) 1 (1, 0)</li> </ul>	culling
	DZP-WG.6401.06.13.2019.eba	1 male	aggression (attacking people) Posthitis	culling
	DZP-WG.6401.06.10.2019.eba	1 male	Aggression (attacking people) Posthitis Break	culling
	DZP-WG.6401.06.19.2019.eba	6 (3 males, 3 females)	Blindness, unresponsive on significant human approach 2 (0, 2) Agonal state 1 (0, 1) Aggression 1 (1, 0) Posthitis 1 (1, 0) Extensive skin lesions 1 (1, 0)	culling
	DZP-WG.6401.141.2020.EB	1 male	Blindness, unresponsive when human approaches significantly	culling
	DZP-WG.6401.141.2020.EBz	8 (8 males)	<ul style="list-style-type: none"> <li>Blindness, no reaction when approaching significantly (damage to eyeballs, loss of vision) 2 (2)</li> <li>extensive skin</li> </ul>	culling



			<ul style="list-style-type: none"> <li>• lesions 1 (1)</li> <li>• Posthitis 1 (1)</li> <li>• injury (amputations, joint injuries, muscle damage) 4 (4)</li> </ul>	
	DZP- WG.6401.108.2021.EB	2 (1 male, 1 female)	Blindness, unresponsive when human approaches significantly 2 (1, 1)	culling
Total eliminated		27 (21 males, 6 females)		

- 6) wildlife monitoring activities carried out by the staff of the Białowieża National Park (great crested newt, selected bird species - woodpeckers, little owl, hairy owl, hazel grouse, corncrake, honey buzzard, otter, beaver, lynx, wolf, European bison);
- 7) an update of the basic characteristics of the BNP forest stands was carried out on the basis of the inventory carried out in 2019-2020 on permanent research plots;
- 8) activities to maintain the proper condition of tourist and road infrastructure for fire protection purposes: in 2020, roads with a total length of about 6 km were repaired. As part of the same activities, work was carried out to keep roads passable for a total length of 172 km in 2020 and 187 km in 2021. The wood removed from the road strip was mostly left for mineralisation and partly sold to the local community (106 m3).

Implementing conservation measures, the Białowieża National Park harvested a total of 670 m3 of wood from the end of September 2019 and until the end of September 2021. The harvesting was the result of activities consisting in:

- a) clearing the road lane in the active protection area; 106 m3 of timber was harvested as part of this,
- b) ensuring safety of people, animals and infrastructure within the European Bison Breeding Centre; 564 m3 of timber was harvested under this activity.

The harvested wood was sold on the local market to inhabitants of neighbouring communes (Białowieża, Hajnówka, Narewka). In terms of sorting, 99% of the total harvest was firewood (M, S4). The Białowieża National Park used 1.5 m3 of wood for its own needs (mainly repairs of the technical infrastructure of the European Bison Breeding Centre). Theft of wood was reported from the area of the Białowieża National Park in the amount of 0.23 m3.

On 26.07.2020 on the area of the Białowieża National Park near the villages of Guszczewina and Gruszki a fire appeared, noticed from the observation tower of the Browsk Forest Inspectorate. The fire was quickly located and fire-fighting units and employees of the Białowieża National Park arrived to extinguish it.

The area destroyed by the surface fire amounted to almost 1.5 ha of spruce-pine forest in the IV age class (tree stand aged 60-80 years). Thanks to the efficient extinguishing action, the fire did not spread to the upper parts of the forest. The cause of this fire was most probably human activity.

## 2. Tourist pressure

Tourist traffic in the objects of the Białowieża National Park from October 2019 to the end of September 2021 was as follows:

- 1) the area of the former Strict Reserve was visited by about 40 thousand people, including about 21 thousand in 2020, including around 1,000 foreigners;
- 2) Museum of Nature and Forestry visited by over 70 thousand people, including approximately 30,500 in 2020, of which approximately 1 thousand foreigners;
- 3) Bison Show Reserve over 316 thousand visitors, including approximately 160 thousand in 2020, of which approximately 4 thousand foreigners. Data on foreigners may be incomplete and underestimated due to the transition to an automated ticketing system.

Due to the pandemic situation, most of this traffic took place during the months of June-September.

In the area of the Strict Reserve various methods of limiting anthropopressure are increasingly used, e.g. by lining portable platforms in places most exposed to trampling, limiting the number of tourists per 1 guide in a group (to 10 people from 2021), limiting traffic in case of bad condition of trails, especially the most visited ones.

There are 44.3 km of trails and hiking routes in the BPN area. In 2020, due to strong winds, the 4 km long route to the Jagiello Oak was closed to tourist traffic for a total of 20 days, including 10 days when the entire forest area of BNP (except for the Bison Show Reserve) was closed to tourist traffic.

In the area of BNP, works were carried out to ensure safety of tourist traffic, in particular cutting with leaving all biomass for mineralisation (1480 trees).

## 3. Education carried out by the Białowieża National Park. Number of participants, target groups, topic of classes, type of classes.

Within the framework of active education carried out by the employees of the Research and Education Department of the Białowieża National Park, activities addressed mainly to children and youth from schools and other educational institutions from the Białowieża Primeval Forest Euroregion, as well as from other parts of the country. However, due to the pandemic situation the number of these classes was significantly lower than in previous years.

In addition to the above-mentioned educational activities, the Voivodship Ecological Knowledge Competition "Biodiversity and forms of nature protection in Poland" was held - The 10th jubilee edition, in which pupils from older classes of primary schools in Podlasie participated.

A very important activity financed, similarly to the Knowledge Competition, from a subsidy of the Provincial Fund for Environmental Protection and Water Management in Białystok, was the Academy of Documentary Film, treating issues including the environment in global terms, especially climate change. It was an activity aimed at secondary schools from the Białowieża Forest area. Moreover, the Białowieża National Park organised or cooperated in the organisation and implementation of outdoor educational events addressed to a wide audience, such as the Podlaskie National and Landscape Parks Picnic or ecological picnics and festivals organised in communes and districts.

All these activities and events were attended by over 8,000 people.

In addition, a very wide range of on-line education was carried out - several on-line competitions were announced, mainly promoted through social media, and met with a great interest of internet users, for example a competition for the name of a European bison born in the European Bison Nature Reserve. The following thematic areas were developed and published: nature-related posts titled "It is worth knowing", historical posts titled "History over one century - 100 years of protection", whose subject matter significantly emphasized the jubilee of 100 years of nature protection in the Białowieża Primeval

Forest celebrated this year, and posts - a photo gallery promoting natural and cultural values of the Białowieża Primeval Forest and the Białowieża National Park. The posts reached over 3 million recipients during the period indicated.

#### 4. Cultural aspects.

The activities of the Białowieża National Park in the cultural and educational aspect were manifested, among others, in the organisation of thematically diverse temporary exhibitions, cooperation with institutions through participation in conferences or meetings. Educational and museum activities and workshops were also organised.

#### 5. Monitoring of the current state of the environment and nature.

Research projects and monitoring carried out by external institutions, in agreement with BPN, are presented in the table below,

**Table 4. List of scientific research projects carried out by external institutions, completed in 2020.**

No.	Title	Institution implementing the project	Project manager	Park co-executors (if any)	Duration
1.	Natural regeneration in nature reserves of north-eastern Poland on the background of changes in the species composition and structure of stands of selected forest communities, on the example of permanent research plots	IBL	K.A. Gabrysiak, M. Sc.		2017-2020
2.	Comprehensive monitoring of stand dynamics in the Białowieża Forest using remote sensing data	ZLN IBL	R. Paluch, Ph.D.		2015-2020
3.	Effect of nectar composition on the reproductive success of orchids	IB UwB	Professor E. Brzosko		2019-2020
4.	Factors of oak regeneration on a fallow land in department 401 of BNP	University of Rzeszów	A. Bobiec Ph. D.		2011-2020
5.	Interactions between ants and wood warblers <i>Phylloscopus sibilatrix</i> under primary forest conditions in BNP	Opole University	Grzegorz Hebda, Ph.D.		2018-2020
6.	"Hair as a non-invasive indicator of the presence of mineral deficiencies and environmental exposure to toxic elements in bison"	PIWet. Puławy	M. Durkalec, Ph. D.	M. Krzysiak, Ph. D.	2019-2020
7.	Morphological evaluation of selected bison organs (trachea and bronchi)	ZHiE UM Białystok	R. E. Czykier		2015-2020
8.	Analysis of biodiversity and enzymatic activity of consortia of	UMCS Lublin	R.		2020

	microorganisms involved in decomposition of spruce ( <i>Picea abies</i> ) wood in BNP		G. Janusz		
9.	Monitoring of rare woodpeckers	OTOP	Ł. Wardecki		2020

**Table 5. List of scientific research projects carried out by external institutions, completed in 2021.**

No.	Project title	Institution implementing the project	Project manager	Park co-executors (if any)	Duration
1.	Regeneration of forest after bark beetle disturbance	Faculty Biol. and Env. Prot. Silesian University	A. Orczewska, Ph. D.		2019-2021
2.	Studies on angioarchitectonics of selected organs of abdominal cavity and heart of lowland European bison	Medical University of Lodz	M. Polguy, Ph. D.		2013-2021
3.	Changes in bat assemblage in response to forest regeneration progress 13 years and 33 years after the hurricane in Białowieża Forest	Department of Forest Ecology of the Forest Research Institute	A. Rachwald, Ph. D.		2019-2021
4.	Texture of primary forest stands in different habitats of the Białowieża National Park	Department of Ecology and Silviculture of the Faculty of Forestry, Agricultural University of Kraków	L. Bartkowicz, Ph. D.		2021
5.	Hydrological analysis of the Narewka River bed and the estuarial section of the Łutownia River in terms of possible restoration measures	Department of Hydrology, Meteorology and Water Management, Warsaw University of Life Sciences	M. Grygoruk, Ph. D.		2021
6.	Changes in chemical and biological characteristics of soil substrates 50 years after placement in an oak woodland	BSG UW	Professor B. Jaroszewicz		2020-2021
7.	Influence of habitat conditions on dead wood decomposition and spruce regeneration in the Białowieża Forest	BSG UW	Professor B. Jaroszewicz		2020-2021

8.	Assessment of the contamination of rivers of the Białowieża National Park by microplastics and evaluation of the scale of their penetration into terrestrial trophic networks.	UŁ	J. Brodecki		2020-2021
9.	Monitoring of selected mollusc species within the framework of State Environmental Monitoring in 2020-2021 (Desmoulin's whorl snail <i>Vertigo moulinsiana</i> )	Chief Inspectorate for Environmental Protection			2020-2021
10.	Monitoring of rare woodpeckers	OTOP	Ł. Wardecki		2021
11.	Monitoring of natural habitats	Chief Inspectorate for Environmental Protection			2021
12.	Monitoring of riverine ichthyofauna for the purpose of assessing the ecological status or potential of surface water bodies	Institute of Inland Fisheries			2021

**Table 6. List of scientific and research projects carried out by external institutions, implemented in the Białowieża National Park, started in 2020.**

No.	Project title	Institution implementing the project	Project manager	Park co-executors (if any)	Duration
1.	Assessment of the contamination of rivers of the Białowieża National Park by microplastics and evaluation of the scale of their penetration into terrestrial trophic networks.	UŁ	J. Brodecki		2020-2021
2.	Analysis of biodiversity and enzymatic activity of consortia of microorganisms involved in decomposition of spruce ( <i>Picea abies</i> ) wood in BNP	UMCS Lublin	M. G. Janusz		2020
3.	Changes in chemical and biological characteristics of soil substrates 50 years after placement in an oak woodland	BSG UW	Professor B. Jaroszewicz		2020-2021
4.	Influence of habitat conditions on dead wood decomposition and spruce regeneration in the	BSG UW	Professor B. Jaroszewicz		2020-2021

	Białowieża Forest				
5.	Impact of spruce stand decomposition on the species diversity of ground flora	IBL	A. Laskowska-Ginszt		2020-2022
6.	Long-term monitoring of bat and insect activity in BNP stands	IBL	I. Ruczyński, Ph. D.		2020-2030
7.	Monitoring of selected mollusc species within the framework of State Environmental Monitoring in 2020-2021 (Desmoulin's whorl snail <i>Vertigo moulinsiana</i> )	Chief Inspectorate for Environmental Protection			2020-2021
8.	Monitoring of rare woodpeckers	OTOP	Ł. Wardecki		2020

**Table 7. List of scientific and research projects carried out by external institutions, implemented in the Białowieża National Park, started in 2021.**

No.	Project title	Institution implementing the project	Project manager	Park co-executors (if any)	Duration
1.	Arboreal microhabitats of natural oak-hornbeam forests	Department of Forest Biodiversity of the Agricultural University of Krakow	F. Przepióra		2021-2022
2.	Analysis of plant colour as a source of phenological information and vegetation condition in the Białowieża National Park	Bioclimatology Laboratory of the Department of Ecology and Environmental Protection, Poznań University of Life Sciences	B. Chojnicki, Ph. D.		2021-2026
3.	Texture of primary forest stands in different habitats of the Białowieża National Park	Department of Ecology and Silviculture of the Faculty of Forestry, Agricultural University of Kraków	L. Bartkiewicz, Ph. D.		2021
4.	Detection of intracellular bacterial parasites of the genus <i>Anaplasma</i> spp. using molecular biology methods in	Witold Stefański Institute of Parasitology,	A. W. Myczka, M. Sc.		2021-2022

	spleen and liver tissues of wild bison ( <i>Bison bonasus bonasus</i> ) in the Białowieża Forest	Polish Academy of Sciences			
5.	Use of dead lying trees by birds	University of Natural Sciences and Humanities in Siedlce	D. Czeszczewik, Ph. D.		2021-2022
6.	Climatic and water conditions in Białowieża Forest	Department of Natural Forests of the Forest Research Institute	I. Sondej, Ph. D.		2021-2025
7.	Hydrological analysis of the Narewka River bed and the estuarial section of the Łutownia River in terms of possible restoration measures	Department of Hydrology, Meteorology and Water Management, Warsaw University of Life Sciences	M. Grygoruk, Ph. D.		2021
8.	Monitoring of rare woodpeckers	OTOP	Ł. Wardecki		2021
9.	Monitoring of natural habitats	Chief Inspectorate for Environmental Protection			2021
10.	Monitoring of riverine ichthyofauna for the purpose of assessing the ecological status or potential of surface water bodies	Institute of Inland Fisheries in Olsztyn			2021

#### 4. State Forest Enterprise

##### A. FORMAL AND LEGAL ASPECT

##### 1. OUV protection - zoning

In order to protect its unique universal value, the World Heritage Site "Białowieża Forest" was divided into zones with specific protection regimes. The table below shows the land area of the forest districts in each zone (area without roads and surface dividing lines).

**Table 8. Area of UNESCO zones (in ha) in individual forest districts**

Form of nature protection	Forest Inspectorate Białowieża	Forest Inspectorate Hajnówka	Browsk Forest Inspectorate	Total

strict (zone 0)	0	0	0	0
partial I (zone 1)	4,305.05	5535.57	1928.03	11768.65
partial II (zone 2)	6368.44	6795.08	10309.69	23473.21
active (zone 3)	1,786.39	4181.61	3958.28	9926.28
buffer	0	2761.76	3805.35	6567.11

Source: Regional Directorate of State Forests in Białystok

## 2. Forms of nature protection functioning in the Site:

There are various forms of nature conservation functioning in the Białowieża Forest, in the area managed by the forest districts, in accordance with national law. The tables below present the areas of particular forms of protection within and outside the site. It is noted that particular forms of protection may overlap.

**Table 9. Nature protection forms (according to the Nature Protection Act) within the boundaries of the site in individual forest inspectorates**

Form of nature protection	Forest Inspectorate Białowieża	Forest Inspectorate Hajnówka	Browsk Forest Inspectorate	Total
Nature reserves [ha]	4305.05	5606.32	1964.67	11876.04
Natura 2000 [ha]	12,587.38	16512.26	18073.28	47172.92
Ecological sites [ha]	54.32	468.84	47.70	570.86
Protected landscape area [ha]	12,207.00	16512.26	20418.23	49137.49
Protection zones around bird nests or lichen sites [ha]	359.94	624.57	1553.78	2538.29
Natural monuments [pcs.]	494	479	82	1055

Source: Regional Directorate of State Forests in Białystok

**Table 10. Nature conservation forms (according to the Nature Conservation Act) in the buffer zone in individual forest districts.**

Form of nature protection	Forest Inspectorate Białowieża	Forest Inspectorate Hajnówka	Browsk Forest Inspectorate	Total
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Nature reserves [ha]	0	153.62	0	153.62
Natura 2000 [ha]	0	2660.09	574.13	3234.22
Ecological sites [ha]	0	47.79	0	19.17
Protected landscape area [ha]	0	2761.76	3805.35	6567.11
Protection zones around bird nests or lichen sites [ha]	0	149.42	0	149.42
Natural monuments [pcs.]	0	55	3	58

*Source: Regional Directorate of State Forests in Białystok*

## **B. NATURE ASPECT**

### **1. Active protection measures in non-forest habitats and protection of rare species**

#### **1) protection of European bison.**

The European bison is one of the most important species constituting the Outstanding Universal Value (OUV) of the Białowieża Primeval Forest World Heritage Site. September 2019 marked the 90th anniversary of the restitution of the European bison in Poland. The work to save this species from extinction and to bring it back to life in the wild began with the bringing of the first bison from the zoo in Berlin to a special enclosure in the Białowieża Forest on 19 September 1929, which marked the beginning of the recreated population.

On this occasion, the European Bison Friends Society under the patronage of the Director of the Regional Directorate of State Forests in Białystok and the Director of the Białowieża National Park organized on 5-6 September 2019 an international scientific conference entitled. "Bison in the Białowieża mother plantation". Following this, the Director of the Białowieża National Park together with the General Director of the State Forests organised a conference in Białowieża on 11 September 2019 to mark the 90th anniversary of the restitution of the European bison.

Currently, the Białowieża Forest is home to the largest herd of bison in Poland and the world. According to the Bison Pedigree Book (2020), there were 715 bison in the wild and 31 in reserve breeding. According to Forest Service observation data, more than 400 individuals of the Białowieża population reside in the Forest Inspectorates: Białowieża, Browsk and Hajnówka.

Despite the undoubted achievements in the restoration of the European bison, it must be remembered that it is still an endangered species due to the high relatedness of all individuals, and thus susceptibility to various diseases. The European bison is not able to exist in the current natural conditions without special protection and care from humans. His fate is an example of how a species can be brought to the brink of extinction in a very short time and how much effort is required to save it. Therefore, in cooperation with scientists and the Białowieża National Park, forest inspectorates implement a number of different programmes for the protection and conservation of this species. They take part in the annual

bison count in the Białowieża Forest coordinated by the Białowieża National Park. They also carry out numerous activities in the reclamation and management of mid-forest meadows, the construction of feedlots, the purchase of fodder and feeding. For many years, forest inspectorates have been actively participating in projects aimed at improving the bison feeding ground and, consequently, its quality of life. An excellent example of this is the project "Comprehensive project for the protection of the European bison in Poland", which is co-financed by the Operational Programme Infrastructure and Environment, the Forest Fund and other external funding sources.



**Photo 2. European bison from the territory of the Hajnówka Forest Inspectorate (photo by J. Morawska Forest Inspectorate Hajnówka)**

The following actions were taken during the reporting period:

- preparation, purchase and distribution of feed, including hay and haylage, beet, etc;
- mowing of meadows together with partial hay harvesting - at the moment approx. 120 ha of meadows in Browsk Forest Inspectorate, approx. 100 ha in Hajnówka Forest Inspectorate and approx. 35 ha in Białowieża Forest Inspectorate are mowed;
- maintenance of fruit tree orchards - on the territory of Browsk Forest Inspectorate on the area of 7.55 ha and in Białowieża Forest Inspectorate on the area of 2.02 ha;
- cleaning of feeding sites and construction of fords (4 in the Białowieża Forest Inspectorate and 10 in the Hajnówka Forest Inspectorate).

Additionally, in December 2012 the Browsk Forest Inspectorate started the project "Bison online", consisting in 24-hour observation of them and, on this occasion, other animals. The project continues to this day and is very popular with online forest education audiences. The Browsk Forest Inspectorate has also conducted many educational classes with children and young people from schools not only in the local area, but also from different regions of the country. It turned out that the Bison Online Project is an excellent nature lesson and even a useful tool for natural scientists. Thousands of Internet users had this way, sometimes for the first time in their lives, an opportunity to learn about the habits of bison

and other species of forest fauna shown on the forest camera, to see how they interact with each other and to become convinced of the natural richness of the Białowieża Forest.

A major difficulty in carrying out the task of mowing the meadows was and is the difficulty in accessing the meadows due to the poor condition of the access roads. In order to ensure favourable conditions for the continued use of the meadows, it is necessary to renovate or improve some of the access routes and to construct or renovate culverts;

**2) protective actions resulting from the Plan of Protection Tasks drawn up for the Natura 2000 area Białowieża Primeval Forest PLC200004 for the protection and preservation of protected objects.**

Conservation measures resulting from the plan of protection tasks consisted, among others, of:

- protection of European bison - improvement of feeding conditions inside the forest complex. The works consist in removing tree and shrub overgrowth and mowing meadows,
- protection of the lesser spotted eagle - maintaining the current way of agricultural use. Removal of trees and bushes (if necessary) mowing with removal of biomass,
- preventing the overgrowth of habitats for droplet ducks (*Porzana porzana*). Removal of trees and shrubs in the belt of large sedge rushes, reed beds and wet meadows,
- protection of the great crested newt (*Triturus cristatus*) - prevention of overgrowing of artificial and natural ponds. Prevent excessive shading of the water table by removing shrubs in the immediate vicinity of the reservoirs,
- protection of subcontinental oak-hornbeam - removal of invasive plant species: impatiens and knotweed.

The above activities were carried out within the framework of the project entitled "Comprehensive project for the protection of species and natural habitats in areas managed by the State Forests National Forest Holding", co-financed within the framework of OPI&E funds and with the use of other financing sources.

Additionally, in 2020, a new invasive species, erectites hawkweed (*Erechtites hieraciifolius* Raf.), was inventoried in the Hajnówka Forest Inspectorate - a plant species belonging to the Asteraceae family. Employees of the Hajnówka Forest District, within the framework of their own resources and forces in 2020-2021, proceeded to eradicate the above species on open areas and under the canopy of the stand in order to prevent its further spread;



**Photo 3. Protective actions carried out by the foresters of the Hajnówka Forest Inspectorate**  
**(photo by J. Morawska Forest Inspectorate Hajnówka)**

**3) measures to protect non-forest habitats - mid-forest meadows, swamps and aquatic ecosystems.**

Water retention is very important for the protection of the Białowieża Forest area. In 2019, the Browsk Forest Inspectorate started modernisation activities on the artificial water body Gnilec. This facility was built in 1989 and the technical condition of the water damming equipment has been deteriorating in recent years. The site is extremely important as a complement to the varied landscape and to enhance recreational and tourist values. It is also an important element of biodiversity protection - it is a habitat for numerous plant and animal species. The reservoir also has a retention function, storing over 100,000 m<sup>3</sup> of water, which is important especially during periods of drought. It should be emphasised that the works on the reservoirs in Gnilec were carried out under natural supervision, outside the bird breeding season, the amphibian migration and breeding period and the fish spawning and migration period. Materials of natural origin are used in the project (field stone, gravel and sand). The task was completed in 2021.

Within the framework of cross-border cooperation, a seminar on restoring the hydrological regime in the Białowieża Forest was held on 5-6 December 2019 at the headquarters of the Białowieża National Park in Belarus. Representatives of the managers of the Polish part of the Facility were present

there: Białowieża National Park and the State Forests. During the seminar, the possibility of implementing a cross-border project for the restoration of the Narewka River - the main river of the forest - was presented and initially discussed. In the 1950s and 1960s the river was reclaimed in several sections, which resulted in the lowering of groundwater levels in the Białowieża Forest area and the drying up of forest habitats located within its catchment area. This influence has been further exacerbated in recent years by changes in climatic conditions (higher temperatures, lower precipitation), which is reflected, inter alia, in the increased incidence of the bark beetle, leading to large-scale decay of tree stands. In 2013-2014, through the efforts of, among others, the State Forests, the former course of the river in the Białowieża Glade was restored as part of the Lesser Spotted Eagle protection project, funded by the LIFE programme. Thanks to these measures, the riverbed was extended from 2.3 km to 3.1 km. Renaturalisation of further sections of the Narewka River should contribute to further slowing down the flow of water through the Białowieża Forest, which in turn should improve hydrological conditions throughout its territory. These activities may also contribute to limiting the aforementioned negative phenomena observed in the Białowieża Forest in recent years;

#### **4) bark beetle gradation.**

Insect infestations, including the European corn borer, occur cyclically in the Białowieża Forest.

In previous decades, active protection treatments were carried out, so that the gradations collapsed after a few years reaching relatively small sizes. The largest hailstorm is currently underway, causing unprecedented disruption to the forest ecosystem of the Forest. Based on the monitoring carried out by the Forest Service of the forest inspectorates from 1.10.2019 to 30.09.2021. the following numbers of infested spruce trees were found in each forest district:

- 20923 in the Hajnówka Forest Inspectorate
- 5279 in the Białowieża Forest Inspectorate
- 4196 in the Browsk Forest Inspectorate;



**Photo 4. Spruce trees attacked by the bark beetle in Jelonka forestry (photo. Browsk Forest Inspectorate)**

**5) anthropogenic threats:**

**a) infractions - violations of regulations revealed by the Forest Guard at the Site.**

One of the threats to the Facility is forest pest, i.e. violations of order regulations and destruction of property and theft of timber. The forest district services are obliged to respond to detected violations of regulations. In the period in question, the following violations of the law were revealed:

- theft - 8 cases and destruction of property - 9 cases, 9 cases were handed over to the police,
- illegal cutting of a forest: 1 case,
- 174 interventions were carried out in connection with animal disturbance, dogs running loose, illegal entry of vehicles into a forest, illegal entry into prohibited areas, littering in a forest, lighting fires in unpermitted places. As a result of undertaken interventions, 165 instructions were given and 9 penalties were imposed.

Littering of forest areas is a serious problem. The forest inspectorates remove, on an ongoing basis and as far as possible, waste lying in the forest. In the period from 1.10.2019 to 30.09.2021, a total of 991 m<sup>3</sup> of waste was removed. The cost of cleaning up the waste exceeded PLN 282 thousand.

**b) fire hazard.**

Forest fires are considered in the nomination application as one of the most important threats. On the territory of forest inspectorates in the Białowieża Forest, 16 fires were recorded between 1.10.2019 and 30.09.2021 (5 in the Browsk Forest Inspectorate, 4 in the Białowieża Forest Inspectorate, 7 in the Hajnówka Forest Inspectorate).

Most incidents occur during the tourist season when high air temperatures favour the start and spread of fires. In addition, the large accumulation of dead wood in the Białowieża Forest increases this danger to such an extent that a fire can appear here literally at any time. Fires are also caused by dry trees falling over power lines and by the existing, active Hajnówka - Siemianówka railway line.

The forest inspectorates, in order to ensure proper fire protection in the forests they manage, have taken a number of measures such as:

- organising comprehensive forest observation and patrolling during the fire danger period in order to detect fires and raise the alarm on their occurrence,
- provision and maintenance of water sources for fire-fighting purposes,
- maintaining fire access to water drawing stations
- marking the water drawing points with information signs,
- establishing and maintaining equipment bases for forest fire fighting,
- removing dangerous trees, bushes and branches at fire accesses,
- mineralisation of strips near tourist facilities.



**Photo 5. Fire near a power line (photo by Browsk Forest Inspectorate)**

In accordance with paragraph 5d of Decision 43 COM 7B.14 of 2019, UNESCO urged Poland to develop and implement a comprehensive Forest Fire Prevention and Suppression Plan for the entire estate, based on a rigorous risk assessment. This plan will be included in the integrated management plan.

Accordingly, acting on the recommendation of the Chief Conservator of Nature, the preparation of the "Fire Protection and Forest Fire Suppression Plan for the Polish part of the Białowieża Forest Transboundary World Heritage Site" was started still in 2019. The task was implemented by the Forest Research Institute, with the participation of the State Fire Service units, managers, local authorities and NGOs.

The plan is an expert assessment and, in accordance with current legislation, should be subject to a strategic environmental impact assessment before implementation. Currently, the draft plan and the forecast of the impact of this plan on the environment are subject to public consultations. Unfortunately, due to the current situation at the border and the introduction of restrictions related to ensuring public security, activities carried out on the basis of the adopted schedule were slightly prolonged. On 10 January 2022, the draft Forest Fire Protection and Suppression Plan for the Polish part of the Białowieża Forest Transboundary World Heritage Site, together with the Environmental Impact Assessment of this plan (including the OUV of the site), was made available for public consultation, which is expected to last 21 days. The material is available on the website of the Forest Research Institute<sup>1</sup>.

#### **4. Scientific research**

Białowieża Forest is an important object from the scientific point of view. The State Forests commission a number of scientific research projects aimed at broadening the knowledge of the primeval forest ecosystems. Knowledge in this field is essential for effective protection of OUV.

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<sup>1</sup> <http://bip.ibles.pl/artukul/139/379/ogloszenie-o-udostepnieniu-projektu-do-konsultacji-spolecznych>.

In the area of the Białowieża Forest, research is carried out throughout the year, mainly by centres associated with the Białowieża scientific community (the Forest Research Institute in Białowieża, the Mammal Biology Institute of the Polish Academy of Sciences, the Geobotanical Station of the University of Warsaw), as well as the Białystok University of Technology, the Warsaw University of Life Sciences and the University of Warsaw.

## **C. SOCIAL ASPECT**

### **1. Firewood for the local community - actions taken by forest inspectorates.**

As it is impossible to provide the local community with access to sufficient amounts of firewood, the forest districts have taken measures to prepare information on alternative means of fuel supply. For this purpose, an analysis of the local market was carried out with respect to companies offering transport of timber from other forest districts, supply of prepared split wood or the possibility of sourcing wood processing residues (sawmill residues). Such information is provided to persons approaching forest inspectorates to purchase firewood. Special information leaflets about the possibility to buy wood in other forest districts in the area have also been prepared.

These are temporary solutions, which do not fully satisfy the needs of the local community. As a result, the level of frustration of the local community is still high, which in turn results in low acceptance for the idea of protection of the Białowieża Primeval Forest as the UNESCO World Heritage site. Complex (systemic) solution of the problem will be elaborated after obtaining necessary knowledge on the needs for firewood and utility wood (e.g. for repairing houses, fences and other farm buildings).

Therefore in the described period only 67 m<sup>3</sup> in the Hajnówka Forest Inspectorate and 2448.23 m<sup>3</sup> in the Browsk Forest Inspectorate were harvested and sold for firewood for the local community.

### **2. Cooperation with the public - building dialogue (expert meetings).**

The Regional Directorate of State Forests in Białystok, in consultation with the General Directorate of State Forests, has initiated a dialogue with stakeholders on issues related to the Białowieża Primeval Forest. To this end, cyclical expert meetings are organised on issues relating to the protection, safety, care and conservation of the Białowieża Forest, as well as tourism and the economy of the region. The organisation of the meetings is a response to the postulates of various circles involved in the Białowieża Forest concerning the need for talks and counteracting harmful disinformation that causes social conflicts.

Meetings are held in a full balance formula. For each stakeholder group, i.e. foresters, scientists, NGOs and representatives of local government, 7 seats are provided. The overriding principle of the meetings is to have a structured discussion across divisions and a balance in the representation of the different parties. The meetings are intended to bring together people with different points of view on the Białowieża Forest, provide direct access to reliable information and a space for substantive discussion.





**Photo 6. Expert meeting as part of ongoing dialogue with the public**

**(Photo by Regional Directorate of State Forests in Białystok)**

The schedule and topics of the meetings are presented in the table below.

**Table 11. Topics discussed during the Expert Meetings in Białowieża Forest**

<b>DATE</b>	<b>TOPICS</b>
5 October 2021 10th meeting	Hydrological conditions of the Białowieża Forest.
20 February 2020 9th meeting	Summary of work on verification of the course of protection zones in the World Heritage Site; principles of protection in individual zones  More information: <a href="http://www.bialystok.lasy.gov.pl/de/spotkanie-viii">http://www.bialystok.lasy.gov.pl/de/spotkanie-viii</a>
16 January 2020. 8th meeting	Management planning process in the Białowieża Forest in the light of UNESCO requirements.  Definition of 100-year old stands.
04 December 2019. 7th meeting	Combating invasive species in the Białowieża Forest.

	<p>Part II of the workshop on problems and challenges related to Zoning in the Białowieża Forest.</p> <p>More information: <a href="http://www.bialystok.lasy.gov.pl/de/spotkanie-vii">http://www.bialystok.lasy.gov.pl/de/spotkanie-vii</a></p>
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*Source: Regional Directorate of State Forests in Białystok*

The concept of zoning correction was prepared by participants of expert meetings consisting of representatives of science, employees of the State Forests and the Białowieża National Park, local authorities of the Białowieża Forest region and non-governmental organizations.

The revision proposal was in response to a recommendation in the 2018 UNESCO - IUCN Report. According to recommendation no. 4 indent 4 of the report "REPORT ON THE JOINT WORLD HERITAGE CENTRE - IUCN REACTIVE MONITORING MISSION TO BIALOWIEZA FOREST (BELARUS and POLAND) FROM 24 SEPTEMBER TO 2 OCTOBER (2018)" the experts recommended to urgently develop a general management plan for the Polish part of the site, including **recommendations for defining a possible adaptation of zoning to simplify the current situation without reducing the area excluded from active forest management (Strict Protection Zone and Partial Protection Zones I and II) and defining management actions based on mapping of OUV defining features.**

The approach to the problem was implemented in several stages. The work was based, among other things, on the currently valid formal and legal foundations, the most up-to-date information on the condition of the object and the OUV elements, the developed assessment criteria, which were subjected to a standardisation process.

The received material concerning the qualification of the natural potential was attempted to be grouped on the basis of existing and spatially defined boundaries in order to simplify the current situation - implementation of recommendation 4, indent 4 of the above mentioned report.

The submitted expert report presents 4 zoning options:

- Option A - grouping based on "versts",
- Option B - grouping based on contemporary wards,
- Option C - based on previous options, grouped with expert adjustments,
- Option D - based on Option C with an extended expert correction.

Option D was developed following a critical appraisal of Option C in a series of so-called expert meetings. During these meetings, detailed verifications of the presented project were made, taking into account local specific conditions, including previously unaccounted for historical artefacts accumulated in certain areas of the forest stand surface with a forest character and documented historical origin, as well as new research in the field of soil science, habitat science and forest phytosociology.

The author of the expert opinion recommends changing the existing zoning according to presented variant D, which as far as possible takes into account the principle of proportionality of zones in particular forest districts.

The percentage share of individual zones according to Option D in the Polish part of the OŚD is presented in the table below.

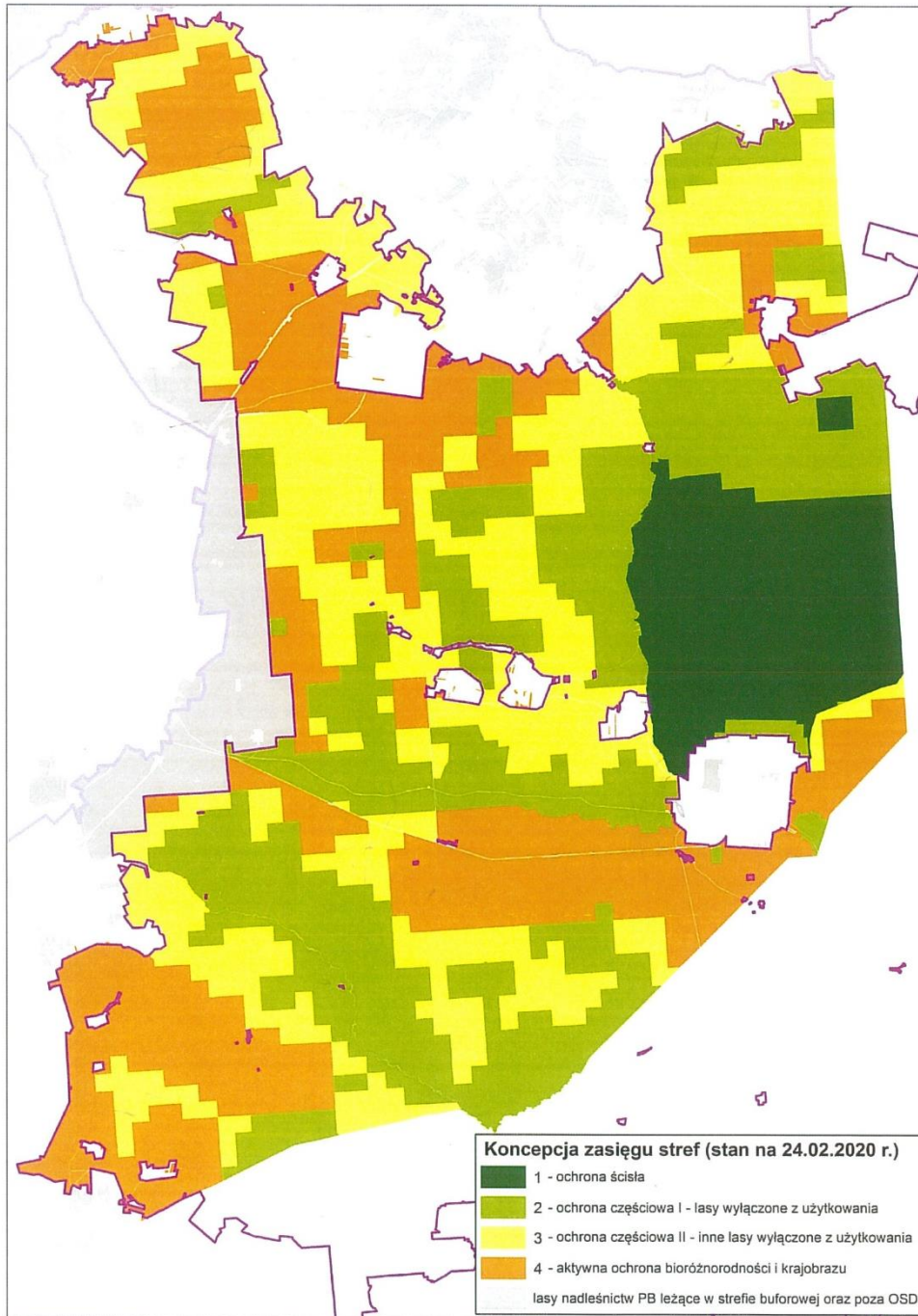
**Table 12. Percentage share of individual zones according to Option D in the Polish part of the NIA**

Zone code	Percentage share of zones in the Polish part of the Białowieża Forest OŚD			
	Białowieża National Park	Białowieża Forest Inspectorate	Browsk Forest Inspectorate	Hajnówka Forest Inspectorate
1	58 %	-	-	-
2	38.9 %	34.2 %	10.8 %	29 %
3	-	33.7 %	41.6 %	23.9
4	2.6 %	31.9 %	29.1 %	32.8 %
Buffer zone	0.5 %	0.2 %	18.5 %	14.3 %
Total [%]	100 %	100 %	100 %	100 %

*Source: Update of the concept of area division of the World Heritage Site Białowieża Forest taking into account the natural potential and the possibility of implementing the UNESCO guidelines (BULiGL 2020).*

Zoning according to Option D is shown below:

#### Wariant D – grupowanie z uwzględnieniem rozszerzonej korekty eksperckiej



*Source: Update of the concept of area division of the World Heritage Site Białowieża Forest taking into account the natural potential and the possibility of implementing the UNESCO guidelines (BULiGL 2020).*

Since 2019, the forest inspectorates of the Białowieża Forest have collaborated with the City of Hajnówka and the Hajnów Cultural Centre on a sculpture plein-air "Wood Sculpture Plein-air. The mysterious Białowieża Forest". On this occasion, activities are carried out to promote the versatile use of the ecological, renewable raw material wood.

### 3. Cross-border cooperation

There is a perceived need for projects that will result in retaining more water in the region. Poles and Belarusians met on this issue in Kamieniuki, at the headquarters of the local National Park "Białowieża Forest" at a two-day seminar (5-6 December 2019) on preparation for restoration of the hydrological system of the Narewka River.

Due to the current COVID-19 pandemic, cooperation both internationally and domestically was hampered and opportunities for meetings severely limited.

#### **4. Tourism in the facility:**

##### **1) Infrastructure.**

The forest inspectorates undertake ongoing measures to maintain existing infrastructure serving tourists, such as: hiking, cycling, Nordic-walking trails, parking and parking spaces, shelters, resting places, viewpoints.

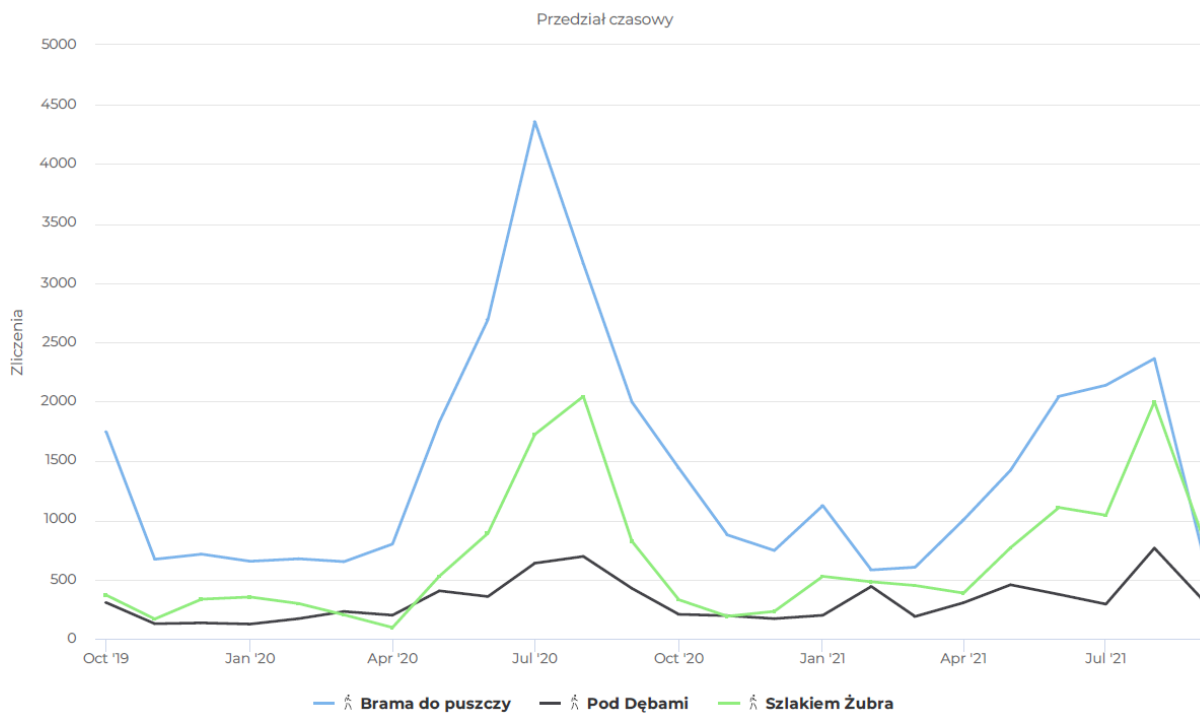
##### **2) Tourist traffic volume in the period 1 October 2019. - 30 September 2021.**

In the Browsk Forest Inspectorate, there are 3 devices of the ECO - Counter system, the purpose of which is to collect data on the basis of which the analysis of tourist traffic of tourist and educational facilities is carried out. The device has been installed on educational paths: Gate to the Forest, Pod Dębami and Szlakiem Żubra. The Forestry Inspectorate keeps statistics on the basis of tools that allow to determine the exact intensity of tourist traffic in the given period. The total is 59,005 counts. Details are presented in the graph below.

The forest inspectorates of Hajnówka and Białowieża do not have the tools to accurately determine the intensity of tourist traffic. The only place where it is possible to actually determine the number of tourists is the narrow-gauge railway in the Hajnówka forest district, where in the reported period 256 trips took place, during which 20 464 tourists were transported.

All forest districts observe very high seasonality of traffic. During holidays and festive periods there is an accumulation of people visiting the Forest. Cycling tourism is also becoming more important.

However, there has been a reduction in the number of visitors to the Forest throughout the period in question due to the COVID-19 pandemic. Also, due to the residence restriction introduced and in force at the date of preparation of this document in the border area due to the need to ensure public safety, tourist traffic is limited compared to previous years.



**Figure 1. Traffic intensity on educational paths in Browsk Forest Inspectorate (Browsk Forest Inspectorate)**

### 3) events:

In the discussed period the forest inspectorates organised, co-organised and participated in picnics and festivals, competitions or nature olympiads. During the events, forest inspectorates promote the Białowieża Forest area both in terms of its exceptional universal values as a UNESCO World Heritage Site and cultural values. These events are aimed at both the inhabitants of the region and tourists visiting the Forest.

There are also cyclical actions aimed at residents and tourists related to forest cleaning, tree planting, winter bird feeding, identification and learning the biology of owls, and many others.

On the territory of the forest inspectorates in the reported period such events took place as: The International Cycling Cross-Country Marathon, the 19th Woodcarving Plein-Air, the Bison Fair, the Educational Rally with a forester, the 8th and 9th edition of the Family Run, the 9th edition of the Polish Nordic Walking Cup, the Craft Fair, the Forest Cleaning Campaign and the 3rd Forest Picnic.



**Photo 7. *The International Cycling Cross-Country MTB Marathon (source: marialipowiecka.pl)***

## **5. Education.**

Educational activities of forest inspectorates are aimed not only at school children and youth, but also adults visiting the Białowieża Forest area and the local community. The forestry authorities offer a wide range of topics and issues to be covered during the classes. These include: classes presenting information on elements of native nature, forester's work carried out as part of sustainable and multifunctional forest management, with particular emphasis on the values of the Białowieża Forest and its protection. Promoting the UNESCO World Heritage Site is an important part of the activities.



**Photo 8. The action of forest cleaning is connected with the international initiative "Clean up the World" (archive of Browsk Forest Inspectorate in Gruszki)**

For most of the time period in question (01.10.2019 to 30.09.2021), forest districts could not hold classes and meetings with direct participation of stakeholders due to the sanitary and epidemiological regulations in force. As a result, the Browsk Forest Inspectorate conducted a hybrid educational activity: field and online classes. This arrangement has created an opportunity for ongoing education irrespective of existing restrictions on meetings. This has also resulted in an opportunity to reach out to a larger audience who, for various reasons, could not attend the residential classes. This has resulted in a significant increase in the audience for the content offered by the inspectorate. Altogether, taking into account meetings in schools, in the forest, education provided at festivals and picnics, as well as online content, this figure exceeded 101 424 people during the period in question. Due to technical limitations and the impossibility of providing specific data on the viewing of materials placed on the Internet, this value cannot be given with complete accuracy and may be significantly higher than the above stated value. In the given period 25 employees of the Browsk Forest Inspectorate were engaged in forest education of the society.





**Photo 9. Educational activities in Hajnówka Forest Inspectorate (photo by J. Morawska Forest Inspectorate Hajnówka)**

The Białowieża Forest Inspectorate also reported a decrease in the number of forest education recipients. This one became particularly apparent in 2020, when the total number of participants in classes was around 1,100, compared to around 18,000 the year before.

Also in the Hajnówka Forest Inspectorate, due to epidemiological threats in 2020 and 2021, the number of classes conducted has decreased significantly. During the reporting period, 116 classes were held with a total of 6141 participants. Educational activities involved 41 employees of the Hajnówka Forest Inspectorate.



**Photo 10. Educational picnic (photo by J. Morawska Forest Inspectorate Hajnówka)**

In summary, in the period in question, 112565 people were covered by various forms of education (including: Białowieża - 5000 people, Hajnówka - 6141 people, Browsk - 101424 people).

## **6. Investments in the period 01.10.2019. - 30.09.2021 carried out by forest inspectorates**

### **1) Białowieża Forest Inspectorate**

- reconstruction of the forest road "Narewowska", completed in 2019,
- construction of the educational path in the Directorate Park in Białowieża,
- construction of 4 fords on the territory of the Białowieża Forest Inspectorate within the project "Comprehensive protection of the European bison in Poland" - action completed in 2020.

A current investment (planned completion in 2021) is the modernisation of the "Jagiellońskie" Forest Education Centre, involving the replacement of the roof covering.

The investment planned in the near future is the revitalization of greenery in the Directorate Park in Białowieża. Due to the fact that this object is under conservation protection, the project and works will be carried out in consultation with the Podlaskie Voivodeship Conservator of Monuments in Białystok.

### **2) Hajnówka Forest Inspectorate**

- modernization of a building for the offices of 2 forestry units - value of the task PLN 327.7 thousand. - financed from own means,
- modernization of the utility building along with hardening of the yard - value of the task - financed from own means,
- modernisation of the boiler room in the forester's lodge - value of the task PLN 28.8 thousand. - financed from own means,
- construction of fords - task value PLN 196.7 thousand - financed under OP Infrastructure and Environment and the Forest Fund,

- construction of a commercial building with a cold store at the forest nursery - task value: PLN 1,186.7 thousand - financed from own funds and the Forest Fund,
- purchase of equipment for the commercial building with a cold store at the forest nursery - task value: PLN 294.5 thousand. - financed from own funds and the Forestry Fund,
- preparing of documentation of passages on fire roads - value of the task PLN 33.1 thousand - financed from the company's own funds,
- preparation of documentation for the water drawing point - task value PLN 13.8 thousand - financed from the company's own funds.

### 3) **Browsk Forest Inspectorate**

- in 2021 the reconstruction of water reservoirs "Gnilec" in the Browsk Forest Inspectorate in Gruszki was completed. The task was carried out between 2019 and 2021 using OPIŚ funds under the project entitled "Adaptation of forests and forestry to climate change - small retention in lowland areas".



**Photo 11. View of one of the two reservoirs (J. Kosiorek Forest District Browsk)**

**7. In accordance with paragraph 172 of the Operational Guidelines, please describe any potential major renewals, alterations and/or new developments planned on the site, buffer zones and/or corridors or other areas that may affect the universal outstanding value of the site, including integrity and authenticity**

The Polish side, in the last quarter of 2021, in relation to paragraph 172 of the Operational Guidelines, sent the following information to UNESCO:

"Pursuant to paragraph 172 of the Operational Guidelines to the Convention for the Protection of the World Cultural and Natural Heritage on the Notification of Intent to Construct a New Site in a World Heritage Area, I would like to inform you that in the transboundary World Heritage Site

"Białowieża Forest" it is planned to place a dam along the state border between Poland and the Republic of Belarus to counter illegal migration.

The construction of a dam along the state border, which is also the border of the European Union, stems from the need to protect against threats to state security. This threat is caused by Belarusian state services directing groups of thousands of migrants from the Middle East to the direct border zone with Poland, including the area of the Białowieża Forest property. The migrants brought by the services of the Republic of Belarus are forced to illegally cross the Polish state border in prohibited places, including the area of the world heritage site "Białowieża Forest". Migrants enter the Polish part of the Białowieża Forest estate, including the Białowieża National Park, much of which has been under strict protection for about a century. Efforts made so far to regulate the situation did not bring the expected results, therefore the Government of the Republic of Poland and the Parliament of the Republic of Poland decided on the necessity to build a dam along the state border with the Republic of Belarus.

It should be noted that the barrier, by preventing illegal migration, will protect the health and lives of people who cross the border in unauthorised places, without knowing the topography of the terrain, wandering and risking freezing or drowning if they enter marshes or peat bogs.

#### **8. Public access to the State of Conservation report**

The Polish Party agrees to make the full version of the report available to the public.

#### **9. Signature of authorised person**