Report on the state of protection
of the World Heritage Site Bialowieza Forest
(Poland, Belarus) (N 33ter)

1. Summary of the report

The States Parties to the Convention - the Republic of Belarus and Poland, the State Parties to the Convention, acknowledged with due attention Decision 43 COM 7B.14 of the World Heritage Centre adopted during its 43rd meeting (Baku, 2019), concerning the Bialowieza 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.

The States Parties are implementing all provisions resulting from Decision 43 COM 7B.14.

The State Forests National Forest Holding in cooperation with the Bialowieza National Park undertakes activities to develop a general management plan for the Polish part of the World Heritage Site Bialowieza Forest. At the present stage, an appointed working team familiarizes itself with good practices in developing the management plan and how to involve in the cooperation the widest possible group of stakeholders.

The actions taken by managers at the World Heritage Site ensure the correct conservation of all elements of natural environment, and do not pose a threat to the OUV of the World Heritage Site, entered under criteria IX and X.

Recognizing the real problem of fire risk in the forest areas of the Site, the Site managers on the Polish side began, as recommended, to prepare a Fire Protection and Forest Fire Extinguishing Plan for the Polish Part of the Cross-Border World Heritage Site “Bialowieza Forest”. In December 2019, the first version of the above plan was presented.

An assessment of the impact of the Narewowska road on the OUV was submitted to the World Heritage Centre. According to the assessment, this investment will not have a negative impact on the Site's OUV.

Work on annexes to forest management plans was started; they will be "technical documents" necessary for the implementation of, among others, safety measures and planned conservation measures indicated in the conservation measures plan of protection tasks for the Natura 2000 Bialowieza Forest area.

The managers initiated a dialogue with stakeholders on issues related to Bialowieza Forest. Regular expert meetings are organized on issues related to the protection, safety, care and preservation of Bialowieza Forest, as well as tourism and economy in the region. The organization of meetings constitutes a response to the demands of various groups involved in Bialowieza Forest matters, concerning the need for talks and counteracting harmful disinformation causing social conflicts. All stakeholder groups are invited to the meetings. Each group is represented by the same number of participants.

The Ministry of the Environment of the Republic of Poland (since 18 November 2019 the Ministry of Climate), the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, as well as all the bodies managing the area of Bialowieza Forest, make every effort to strengthen mutual
cooperation, as well as to continue the dialogue with local communities and NGOs. Preparation and agreement on documents required by decisions of the UNESCO World Heritage Committee takes place on the forum of the Polish-Belarusian Working Group on Cross-Border World Heritage Site Białowieża Forest.

2. Recommendations arising from World Heritage Committee Decision 43 COM 7B. 14 and information on the implementation of recommendations

2.1 Białowieża National Park (BNP)

Recommendations contained in points 5b - 8 and 11 - 13 of the Decision do not apply to the area managed by Białowieża National Park. BNP participates in the work of the team to develop an overall management plan for the Polish part of the World Heritage Site "Białowieża Forest", thus fulfilling point 9 of the Decision.

2.2. The State Forests National Forest Holding

[The World Heritage Committee] urges the State Party of Poland to ensure that all forest operations in the property comply with the following management prescriptions in line with the 2014 Nomination and as recommended by the 2018 mission:

a) In the strictly protection zone as well as in the partial protection zone I and II, ensure that no forest management interventions are undertaken, including removal of deadwood, sanitary cuttings or any active regeneration activities (including soil preparation and tree planting).

In the discussed period, since the last report (from 1 July 2018 to 30 September 2019), in the Forest Districts of Białowieża, Browsk and Hajnówka, forest management activities consisting of harvesting and exporting wood took place only in the active zone and outside the World Heritage Site "Białowieża Forest" area, i.e. in the buffer zone. All the works were related to the need to ensure safety and the implementation of the existing plans: the Conservation Measures Plan (CMP) or Forest Management Plans (FMP) in the scope of the naturalisation of forest ecosystems. The quantities of harvested wood in Forest Districts by the UNESCO zones are presented in Table 1.

In accordance with recommendations of the Reactive Mission, Forest Districts have suspended the forest regeneration works in the partial protection zone II. Only in the Białowieża Forest District the regeneration works were performed in an area of 2.35 ha in compartments 367A l, 367A n, 394A a; the works started and finished before the UNESCO/IUCN mission (the mission took place from 24.09.2018 to 02.10.2018).

In the Browsk Forest District, natural regeneration was recorded in 2018 in an area of 1.10 hectares in compartment 128Ca. It is reported that this regeneration appeared spontaneously, without prior intervention.

No regeneration works were carried out in the partial zone I.

Table 1. Wood harvesting in /m³/ in the period from 01.07.2018 to 30 September 2019, broken down by UNESCO zones and Forest Districts
<table>
<thead>
<tr>
<th>UNESCO Zones for WHS</th>
<th>Białowieża Forest District</th>
<th>Hajnówka Forest District</th>
<th>Browsk Forest District</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>strict (zone 0)</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>partial I (zone 1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>partial II (zone 2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>active (zone 3)</td>
<td>-</td>
<td>109.14</td>
<td>458.18</td>
<td>567.32</td>
</tr>
<tr>
<td>buffer</td>
<td>-</td>
<td>-</td>
<td>317.56</td>
<td>317.56</td>
</tr>
</tbody>
</table>

b) In the active protection zone, limit forest management activities exclusively to interventions directly aiming at speeding up the process of tree stand replacement to a more natural broadleaved oak – hornbeam forest or at preserving certain associated non-forest habitats, including wet meadows, river valleys and other wetlands and habitats of endangered plants, animals and fungi. The necessary active protection measures should be detailed in the Integrated Management Plan.

In the active protection zone and in the buffer zone, the Forest Districts undertake actions related to the acceleration of the forest conversion towards a species composition appropriate for the habitats. Therefore, in the active protection zone, regeneration was carried out in an area of 3.31 ha by planting oaks and lime trees in groups, i.e. species for which a serious problem with natural regeneration and retention of young trees in the environment has been observed for years. Between the artificially planted sites, naturally appearing young trees of other species such as birch, hornbeam, aspen, willow, maple and other indigenous species are supported. This creates a forest with a structure similar to the natural one.

In addition, natural regeneration of habitat specific species is promoted and initiated. In the discussed period, natural regeneration of pine and oak trees was recorded in the active zone in a total area of 2.7 ha, and in the buffer zone in an area of 0.33 ha.

c) In the entire property, restrict safety cuttings only to areas along specific roads and paths (at a 50 m-distance from each side) on the basis of a clear risk evaluation plan.

Due to the legal obligation to ensure safety in the area managed by the forest districts, an ongoing risk assessment is carried out for people present in the forest. According to national regulations, access for the public to forest areas not covered by a national park or nature reserve is, except in extraordinary cases, unlimited. This means that people are allowed to move around the forest not only on the indicated roads. Consequently, and in view of the ongoing outbreak of spruce bark beetle, which has resulted in the accumulation of significant quantities of dead trees, the Forest Districts have identified real risks: loss of health and life caused by falling dead trees and the occurrence of forest fires. Attention is drawn to the fact that at the end of September 2019 forest districts recorded more than 1 500 000 dry spruce trees. Consequently, the managers bearing full responsibility for the life and health of the people staying in Białowieża Forest are obliged to take all measures to eliminate or reduce the risks.

One of the measures that managers had to take in those difficult circumstances is the introduction of entry bans in areas where there is a particularly high risk of spruce trees falling down. This is a highly
controversial solution for the local population, as it limits tourist activities. Moving along tourist trails and main roads where active safety measures are taken is excluded from the bans. In places identified as areas of increased risk, i.e. along public roads and other important communication routes, such as fire protection access roads or tourist trails, car parks and in places particularly frequented by tourists, trees constituting a real danger are cut down up to 50 metres from the place. The assessment of dangerous trees is carried out by employees of the Forest Districts as part of their daily duties, while patrolling the site. They are supported by an advisory team appointed by the Director of the State Forests Regional Directorate in Bialystok by Decision No. 74 of 2 August 2017 (as amended). In addition, in autumn 2019, a pilot specialist training for selected employees was conducted. At the end of the training a certificate of tree inspector was granted.

Some of the wood from trees that posed a real danger was taken out of the forest for firewood for the local community (775.74 m³ in total), the rest remained on the ground for natural decomposition. The harvesting took place only in the active and buffer zones, where, according to the renomination application, such activity is allowed. The number of trees felled close to roads and trails is presented in Table 2.

Table 2. Number of trees removed close to roads and trails (pcs) in the period from 01.07.2018 to 30 September 2019, broken down by the Forest Districts.

<table>
<thead>
<tr>
<th>Forest District</th>
<th>Number of trees removed close to roads and trails (pcs)</th>
<th>Information on inspections made by the advisory team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Białowieża</td>
<td>15 300</td>
<td>3 field inspections</td>
</tr>
<tr>
<td>Hajnówka</td>
<td>24 400</td>
<td>2 field inspections and 3 opinions issued</td>
</tr>
<tr>
<td>Browisk</td>
<td>6 900</td>
<td>3 field inspections</td>
</tr>
<tr>
<td>Total</td>
<td>46 600</td>
<td></td>
</tr>
</tbody>
</table>
d) For the entire property, develop and implement a comprehensive Forest Fire Prevention and Suppression Plan based on a rigorous risk assessment, to be included in the Integrated Management Plan.

The IUCN Evaluation of Nominations of Natural and Mixed Properties to the World Heritage List\(^1\) indicates that a forest fire is a potential threat, also defined in the renomination application of 2012. Climate change may affect the future distribution of forest ecosystems and may also increase the risk of forest fires. As a result of this, the work on the "Forest Fire Protection and Forest Fire Extinguishing Plan for the Polish Part of the Białowieża Forest Transboundary World Heritage Site" is about to be

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\(^1\) [https://unesdoc.unesco.org/ark:/48223/pf0000233351](https://unesdoc.unesco.org/ark:/48223/pf0000233351)
completed. This is an important element in the preparation of an integrated management plan of UNESCO World Heritage Białowieża Forest Site.

This plan is a teamwork coordinated by a specialist scientific unit - Forest Fire Protection Laboratory at the Forest Research Institute. So far, there have been four meetings of a team of experts from various institutions (State Fire Service, Police, Border Guard, Military, Białowieża National Park, State Forests), a wide group of stakeholders: local governments and non-governmental organizations, which were represented, among others, by foreign experts. Within the framework of the work, field data were updated, which were used to develop the fire risk analysis.

Moreover, in June and July 2019, two meetings of the expert platform for dialogue² initiated by State Forests were held; they were devoted to the fire hazard in Białowieża Forest. The aim of the meetings is to initiate and conduct a dialogue with the participation of all stakeholder groups, to exchange information and views, and, as a consequence, to work out a compromise and agreement on issues that have been the source of social conflicts so far. The overriding principle of the meetings is to conduct an orderly discussion, overcoming divisions and balanced representation of individual parties. The aim of the meetings is to bring people together, provide direct access to reliable information and space for substantive discussion. During the meetings on 14 June and 18 July, the Białowieża Forest fire protection was discussed in a situation of great danger caused by the accumulation of flammable material, mainly spruces dead due to the outbreak of the spruce bark beetle. Detailed information was provided on the fire protection system in the State Forests, Białowieża National Park and the cooperation of the site managers’ services with specialized rescue units in the region (State Fire Services, Volunteer Fire Services, Fire Services in the military unit, etc.).

Requests the State Party of Poland to revoke the amendment of the Forest Management Plan (FMP) for the Białowieża Forest District and ensure that any new FMP for areas within the property are based on the new overall Management Plan of the Polish part of the property.

In the period covered by the report (July 1, 2018 to September 30, 2019), the annex binding for the Białowieża Forest District was not fully implemented. A principle was adopted, expressed in a letter from the Director of the Regional Directorate of State Forests in Białystok of 23 July 2018 (ref. no.: ZS.6005.7.2018.MS) that until a new annex is developed and approved, the current one may be implemented only to the extent necessary to ensure public safety. Work on the approval of the new annex is in progress, in accordance with the recommendations from the Reactive Mission of 2018.

Also considers that the existing FMPs should not be amended, or only in a very restrictive way allow for strictly necessary safety measures and on the basis of a clear risk evaluation plan and that any amendment should be sent to the World Heritage Centre with a clear justification, for review by IUCN, before approval.

The development of the annexes was initiated because of the identification of basic risks: the risk of a catastrophe in a military unit, the risk of loss of health or life of people and animals, the risk of fire.

² For more information on the results of these meetings please visit the following website: http://www.bialystok.lasy.gov.pl/spotkania-eksperskie-puszeza-bialowieska
The actual risk assessment carried out consists, among other things, of the following elements: current tree stand assessment, current forest condition assessment, conditions prevailing in the forest from the point of view of threats to people present in the forest, assessment of safety on forest roads important from the point of view of fire safety, fire hazard assessment. The actual risk assessment also takes into account the obligations of foresters resulting from internal regulations, laws and regulations concerning the need to ensure people's safety in forests, as well as international regulations, including in particular the provisions of the renomination application and the judgment of the European Court of Justice.

The annexes to the forest management plans for the Forest Districts of Białowieża, Browsk and Hajnówka were prepared in accordance with the recommendations of the experts from the Reactive Mission in 2018. The process of preparation of the documents was carried out in accordance with the national regulations on environmental impact assessment of the intended plans. An impact assessment of the planned activities on the outstanding universal value (OUV) of the Białowieża Forest UNESCO World Heritage Site was also prepared. The conducted analyses did not show that the planned works pose a threat to the environment of Białowieża Forest, including the OUV of the site. The Ministry of the Environment received documentation for the annexes to the forest management plans for the Forest Districts of Białowieża, Browsk and Hajnówka. The documentation for the needs of the annexes, as well as the manner and quality of the strategic environmental assessment procedure was analysed by the relevant substantive unit in the Ministry of the Environment. In accordance with Article 172 of the Operational Guidelines to the World Heritage Convention, the documentation for the draft annexes was sent to the World Heritage Centre for review before approval. It should be emphasized that the annexes to the forest management plans for forest districts of the Forest were prepared on the basis of a factual risk assessment, which was carried out by foresters in the course of their duties.

The factual risk assessment is an activity carried out systematically by the Forest District services. In their daily work, on a continuous basis foresters assess various threats to Białowieża Forest, in particular those related to environmental and climate change, as well as threats related to human activity and animal life.

The risk assessment of the risks associated with unpredictable events that increase the risks in Białowieża Forest, such as sudden weather events, disease outbreaks or increased occurrence of various organisms, is of particular importance. The obligation of land managers to carry out factual risk assessment results directly from legal regulations. The results of works in the field of risk assessment are presented in draft annexes to the Forest Management Plans prepared by individual Forest Districts.

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), the Director of the Regional Directorate of State Forests in Białystok decided to adapt the various professional risk assessment methods used so far to international standards and regulations resulting from legal provisions. The Director of the Regional Directorate of State Forests in Białystok entrusted the development of a uniform risk management plan to an external expert. The basic tool for reporting the state of risk will be the "risk register" kept on an ongoing basis in forest districts. As part of the workshops carried out in Białowieża Forest units, preliminary "risk registers" were developed for individual areas of forest.
districts’ activities. According to the management plan assumptions, the registers will be updated by the Forest Districts on an ongoing basis so that they can effectively select appropriate actions to reduce the identified risks. A meeting will be held in the near future to review the registers and adopt an implementation procedures.

*Reiterates its request to the State Party of Poland to develop, as a matter of priority, an overall Management Plan (MP) for its part of the property, which places the protection of the property’s OUV as its central objective, also taking into account the recommendations of the 2018 mission and to submit a draft of the overall MP to the World Heritage Centre for review by IUCN before its final approval.*

Preparatory work is currently underway to develop the Polish part of the overall management plan for the World Heritage Site Białowieża Forest. As part of this work, selected current management plans for other sites have been analysed, work has started on identifying stakeholders and how they can be actively involved in the plan development process and the plans, strategies and studies that the management plan for World Heritage Site may affect have been identified.

*Also requests the States Parties of Belarus and Poland to expedite the preparation of a Transboundary Integrated Management Plan, defining the overall management vision for the property based on the Statement of OUV, and setting out the transboundary governance system, as recommended by the 2018 mission.*

The Belarusian side presented the transboundary management plan for the World Heritage Site Białowieża Forest at a meeting of the Polish-Belarusian Working Group for the Transboundary World Heritage Site Białowieża Forest. At the same time Belarusian side started to prepare the Management Plan for Belarusian part of Białowieża Forest which will be prepared until the end of 2020.

Once the Polish part of the overall management plan has been completed, together with Belarusian side, Poland will start to prepare the Transboundary Integrated Management Plan within the Working Group.

*Notes with concern that the upgrading of the Naręwowska road by the State Party of Poland could potentially affect the ecological connectivity in the property, and requests moreover the State Party of Poland to suspend any upgrading works on the road pending completion and submission of an Environmental Impact Assessment (EIA) which specifically assesses the impacts of the road improvement on the OUV of the property, in line with Paragraph 172 of the Operational Guidelines.*

In 2018, modernisation works were carried out by paving a new, durable, environmentally friendly surface. As a result, the sandy (muddy) surface was replaced with a durable material, improving the comfort of road use and reducing the environmental impact (lower fuel consumption, which translates into less air pollution - shortening the distance, smooth driving, elimination of cumbersome dust). At the same time, the postulates of the local community and tourists demanding renovation of this important road in order to improve its quality were met.
Following the recommendations of the UNESCO, an assessment of the impact of the investment on the OUV was performed. This analysis did not show the negative impact of the road modernization on the natural environment of Białowieża Forest and on the OUV of the World Heritage Site. This assessment was submitted to UNESCO with the letter of the Ministry of the Environment ref. no.: DOP-WPN.076.18.2019 dated 02.08.2019.

All obligations resulting from national and European Union law in the field of environmental impact assessment of the investment have been fulfilled.

2.3 Implementation of recommendations concerning the Belarusian part of the World Heritage Site

Further requests the State Party of Belarus to strengthen the legal status and precedence of the Belovezhskaya Pushcha National Park MP, making it obligatory for all other relevant MPs, such as the forest MP and the wildlife MP, to be aligned with it.

As regards the recommendations for Belarus to strengthen the legal status and increase the priority of the management plan of the Belovezhskaya Pushcha National Park, it should be noted that the Republic of Belarus adopted the new Law of the Republic of Belarus of 15 December 2018, No 150-Z “On specially protected natural areas”. Article 32 of this Law states that the management plan of the specially protected natural area is subject to strict implementation.

Also welcomes the moratorium on wolf hunting in the Belovezhskaya Pushcha National Park (Belarus), and requests furthermore the State Party of Belarus to legally prohibit wolf hunting in the national park, in order to allow the population to continue its recovery.

No wolf hunting is or will be carried out in the Belarusian part of the World Heritage Site in accordance with the law of the Republic of Belarus in effect.

3. Other current issues related to the state of conservation and identified by the State/Party (States/Parties) which may affect the OUV of the Site

The Polish part of Białowieża Forest is managed by various entities, i.e. Białowieża National Park and three Forest Districts which are a part the State Forests National Forest Holding: Białowieża, Browsk and Hajnówka. In addition, there are various, also overlapping, forms of nature protection and, consequently, various nature protection authorities are responsible for the implementation of tasks in the area of Białowieża Forest. The Belarusian part of Białowieża Forest is managed by the Belovezhskaya Pushcha National Park.

3.1 Białowieża National Park

1. Implementation of protective activities resulting from the Białowieża National Park Management Plan
The Bialowieża National Park focused on the implementation of activities provided for in the provisions of the Management Plan. In 2018 (from October) and 2019 (until the end of September) the following activities were realized under the Plan:
1a) maintenance of non-forest ecosystems (mowing with removal of biomass). In 2019, 106 ha were mowed, providing 53 tons of hay and 27 tons of haylage. 40 tonnes of hay were bought from external suppliers. The quantities were used to supplement feed deficiencies for bison in free roaming herds and for those kept in closed breeding;
1b) removal of alien species from forest ecosystems: in 2018 this action was carried out on in an area of 0.36 ha, and 2019 on in an area of 11.37 ha;
1c) activities for the protection of the bison:
   - winter feeding places were maintained in adequate sanitary condition;
   - during the winter feeding of the bison in 2018/2019, the feed was distributed in 19 places, in the amounts as above;
1d) running the European Bison Breeding Centre, where a small bison population (about 30 animals) is kept, which is a specific stock of animals with known genetic traits in case of extinction of the bison population living in free roaming herds;
1e) the Park employees also monitored the number of bison and controlled the health of herds living in the enclosure and in the wild; if necessary, they eliminated bison. The elimination of bison carried out by the Bialowieża National Park is based on permits (decisions) issued by the Minister of the Environment (ME) in the area of the Bialowieża National Park and the General Director for Environmental Protection (GDOŚ) in the area of Natura 2000 Bialowieża Forest. Decisions of the Ministry of the Environment and the General Director for Environmental Protection (GDOŚ) specify the number of bison and conditions of their elimination, as well as the area covered by the decision. According to the decisions, the elimination of the following bison was allowed:
   1) seriously ill (an incurable disease that prevents an individual from functioning properly in the environment, including infectious diseases that pose an epizootic risk);
   2) seriously injured or drastically affected by past illness or injury;
   3) aggressive, threatening the life or health of humans or animals.
Bison to be eliminated are selected on the basis of observations of the Park's own employees and reports from outside, by a veterinarian employed in the Park and the manager of the European Bison Breeding Centre (OHŻ). In case of closed breeding, elimination permits are issued for specific animals. Elimination is performed by firing a hunting weapon by a qualified person appointed by the Director of Bialowieża National Park or by means of pharmacological agents by a veterinarian. Each time an employee of the European Bison Breeding Centre and a veterinarian take part in elimination. Each killed bison is examined by a veterinarian (especially for bovine tuberculosis), who prepares a protocol from the autopsy containing data of the bison (age, sex, registration or pedigree number), the cause of elimination, information about pathological changes and photographic documentation. The protocols are submitted together with a report on the implementation to the authority issuing the decision. In the course of the bison post morten, the scientific centres concerned, having the appropriate permissions, collect material for research from the killed animal.

Table 3. Data on elimination of bison by BNP in the period 01.10.2018-30.09.2019

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<table>
<thead>
<tr>
<th>Decision (permission)</th>
<th>Number of eliminated bison</th>
<th>Cause of elimination</th>
<th>Manner of elimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed breeding</td>
<td>1 male (M13801 POGRMCA)</td>
<td>Foreskin Necrotic Inflammation</td>
<td>Shot</td>
</tr>
<tr>
<td></td>
<td>1 female (F 10166 POWIKA)</td>
<td>Neosporosis</td>
<td>Pharmacological elimination</td>
</tr>
</tbody>
</table>
| Free roaming breeding | 6 (5 males, 1 female)     | - lying in the place of finding, no reaction when a person approaches significantly 2 (1, 1)  
- extensive skin lesions 2 (2, 0)  
- Foreskin Necrotic Inflammation 1 (1, 0)  
- injury (scapula fracture) 1 (1, 0) | Shot |
|                       | 1 male                    | Aggression (attacking people)  
Foreskin Necrotic Inflammation | Shot |

Elimination in total 9 (7 males, 2 females)

11f) activities in the field of nature monitoring carried out by the Park employees, including among others: Northern crested newt, selected bird species (including woodpeckers, pygmy owl, Tengmalm’s owl, hazel grouse, corncrake, honey buzzard), otter, beaver, lynx, wolf, bison;
11g) actions aimed at maintaining a proper condition of tourist and road infrastructure designed for fire protection. In 2019, a total length of about 1.5 km of roads was renovated. Within the framework of the same actions, works were carried out in a total length of 118 km of roads in order to keep them passable.
11h) the conservation measures envisaged by the Management Plan, consisting in the clearing of the road (which was blocked by fallen and broken trees) in the area covered by active protection (UNESCO zone II) and in removing the excess of lying and standing dead trees from the breeding enclosure and the demonstration enclosure of the Bison Breeding Centre of the Białowieża National Park ((UNESCO zone II). In the case of the Bison Breeding Centre, the purpose of the measures will be to ensure the safety of employees’ and animals’ movement and the safety of the breeding infrastructure (internal and external fences, feeding stands and storage facilities). Given the limited space of the enclosures and the organization of breeding, wood is removed outside the Centre – in order to ensure that as
much space without lying and broken trees as possible is available to animals. The purpose of the measures, the range of actions, the manner of their execution and their scope were presented in the previous periodic reports and during the mission in 2018. As part of these activities, 51 m³ of wood was obtained. The harvested wood was sold on the market to local residents of the surrounding municipalities (Białowieża, Hajnówka, Narewka). In terms of sorting, 45 m³ (100% of the total harvest) was firewood (M, S4). Białowieża National Park used 6 m³ of wood for its own needs (mostly renovations of technical infrastructure of the European Bison Breeding Centre). No theft of wood from the area of Białowieża National Park was reported.

2. Tourist pressure

The tourist traffic in the facilities of Białowieża National Park from October 2018 to the end of September 2019 was as follows:

1) the strict protection area was visited by about 27,500 people, including over 4,000 foreigners;
2) the Museum of Nature and Forest was visited by about 71,000 people, including about 2,600 foreigners;
3) the European Bison Show Reserve was visited by over 171,000 people, including about 5,900 foreigners (figures for tourists from abroad are incomplete and underestimated, due to automatic ticket sales system).

Within the Strict Protection Area "Reserve" various methods of limiting the effects of anthropopressure are increasingly used, e.g. by setting portable platforms in places most exposed to trampling, limiting the number of tourists per one guide in a group (up to 12 people), limiting traffic in case of a bad condition of the trails, especially the most visited ones.

Within the BNP area there are 44.3 km of tourist trails and routes. In 2019, due to strong winds, the 4km long route to Jagiello Oak was excluded from tourist traffic for a total of 3 days, and for 2 days the entire forest area of the Park (except for the European Bison Show Reserve) was closed to tourist traffic.

In the BNP area works were carried out in order to ensure safety of tourist traffic, especially cutting, with leaving all biomass for mineralization (1024 trees).

3. Education realized by Białowieża National Park. Number of participants, target groups, subjects of classes, type of classes.

Within the framework of active education conducted by the employees of the Scientific and Educational Department of the Białowieża National Park, numerous activities were carried out, directed mainly at children and youth of schools and other educational institutions from the Białowieża Forest Euroregion. Among others, educational activities were carried out (small groups and field activities), and so were natural art and photography competitions, ecological and educational picnics and festivals, which were coordinated and organised by Białowieża National Park, as well as those in which the park participated as a co-organiser of events organised by other institutions. The 9th edition of the Ecological Knowledge Contest at the level of voivodship and the 25th exhibition of
Białowieża Forest mushrooms were realized. All these activities and events were attended by about 5,500 people. In addition, passive education was conducted: educational posts under the campaign "It's worth knowing"; "Grzybowo Naturowo" reached 1,570,682 recipients. In the second week of September, a series of educational and tourist events "A week with forest" organized by the Park, the State Forests and Białowieża National Park took place. There were several thematic walks in the Park, devoted, among others, to the presentation of natural processes in the Strict Protection Area "Reserve" and trips to the rutting grounds. About 50 people participated in these events.

4. Cultural aspects.

The activities of Białowieża National Park in terms of cultural and educational aspects were manifested, among others, in the organization of temporary exhibitions on various themes, cooperation with various institutions consisting of co-organization and participation in conferences or meetings. Educational and museum activities and workshops were also organized. The Park co-organized, together with the Forestry Department of the Białystok University of Technology in Hajnówka, a scientific conference entitled "Tourism in natural valuable areas".

On 11 September 2019 the conference "90 years of European bison restitution in Białowieża Forest" was held in Białowieża National Park. This important event organized in cooperation with the State Forests National Forest Holding was a summary of the project "For the Forest for People - Forestry of the 21st century in response to the expectations of society in the field of ecological education". The conference aimed at symbolic celebration of the 90th anniversary of one of the most important nature protection events in Poland – the European bison restitution in the Białowieża Forest.

On 23 October 2019, in the seat of Białowieża National Park, a ceremony inaugurating the celebration of the 40th anniversary of the inscription of Białowieża National Park on the UNESCO World Heritage List took place. The event was prepared by Białowieża National Park in cooperation with the Regional Directorate of State Forests in Białystok together with the Forest Districts of Białowieża, Browsk and Hajnówka. The ceremony was accompanied by the opening of two exhibitions - sculptures by Józef Wilkoń and archival photographs by Professor Jan Jerzy Karpiński. The ceremony was held under the Honorary Patronage of the Minister of the Environment, Minister of Sport and Tourism, Polish Committee for UNESCO, National Heritage Institute and Director General of State Forests.

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

Research projects and monitoring were carried out by external institutions, in agreement with BNP (changes compared to the 2018 report):

**TABLE 4. LIST OF SCIENTIFIC AND RESEARCH PROJECTS CARRIED OUT BY EXTERNAL INSTITUTIONS, COMPLETED IN 2018.**

<table>
<thead>
<tr>
<th>No.</th>
<th>Project title</th>
<th>Institution implementing</th>
<th>Project Manager</th>
<th>Co-performers</th>
<th>Duration</th>
</tr>
</thead>
</table>

13
<table>
<thead>
<tr>
<th>No</th>
<th>Project title</th>
<th>Institution implementing the project</th>
<th>Project manager</th>
<th>Co-performers from the Park (if any)</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Microbiological flora in Białowieża National Park</td>
<td>University of Białystok</td>
<td>Prof. I. Święciecka</td>
<td>A. Keczyński MS Eng</td>
<td>2019</td>
</tr>
</tbody>
</table>

**Table 5. List of Scientific and Research Projects Carried Out by External Institutions, Realised in Białowieża National Park, Started in 2019.**
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Institution</th>
<th>Author(s)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Influence of nectar composition on orchids' reproductive success</td>
<td>IB UwB University of Białystok</td>
<td>Prof. E. Brzosko</td>
<td>2019-2020</td>
</tr>
<tr>
<td>3</td>
<td>Microhabitat variability as a factor of spatial undergrowth diversity in the Tilio-Carpinetum complex in the context of different development phases of the stands</td>
<td>University of Agriculture in Rzeszów</td>
<td>A. Bobiec, PhD</td>
<td>2019-2020</td>
</tr>
<tr>
<td>4</td>
<td>Species and spatial structure of tree groups with monumental dimensions in the natural Białowieża Forest</td>
<td>BSG UW Geobotanical Station of the Botanical University</td>
<td>B Jaroszewicz PhD</td>
<td>2019</td>
</tr>
<tr>
<td>5</td>
<td>Forest regeneration after disturbances caused by the gradation of the spruce bark beetle</td>
<td>Faculty of Biology and Environmental Protection, University of Silesia.</td>
<td>A. Orczewska PhD</td>
<td>2019-2021</td>
</tr>
<tr>
<td>6</td>
<td>Monitoring of river ichthyofauna in 2019-2021 for the assessment of the ecological status or potential of uniform surface water bodies</td>
<td>Department of River Fisheries of the Institute of Inland Fisheries</td>
<td>Dr P. Prus</td>
<td>2019-2021</td>
</tr>
<tr>
<td>7</td>
<td>Changes in the bat group in response to progress in forest regeneration 13 years and 33 years after the hurricane in Białowieża Forest</td>
<td>Department of Forest Ecology IBL</td>
<td>Dr A. Rachwald</td>
<td>2019-2021</td>
</tr>
<tr>
<td>8</td>
<td>Animal coat as a non-invasive indicator of mineral deficiencies and environmental exposure to toxic elements in European bison</td>
<td>National Veterinary Research Institute in Pulawy</td>
<td>Dr M. Durkalec, Dr M. Krzysiak</td>
<td>2019-2020</td>
</tr>
<tr>
<td>9</td>
<td>Inventory and assessment of the technical condition of the forester's lodge and double granary located in the area of Dziedzinka in BNP</td>
<td>Museum of Agriculture in Ciechanowiec</td>
<td>E. A. Wilbik MS</td>
<td>2019</td>
</tr>
</tbody>
</table>

3.2. The State Forests National Forest Holding

A. FORMAL AND LEGAL ASPECT

1. OUV protection - zoning

In order to protect the outstanding universal value of the Białowieża Forest World Heritage Site in the nomination application, the site was divided into zones with specific protection regimes. Table 6 presents the surface area of Forest Districts in individual zones (it is the area without roads and surface division lines).

<table>
<thead>
<tr>
<th>UNESCO zones for WHS</th>
<th>Białowieża Forest District</th>
<th>Hajnówka Forest District</th>
<th>Browsk Forest District</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>strict (zone 0)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>partial I (zone 1)</td>
<td>4 235.94</td>
<td>5535.57</td>
<td>1928.03</td>
<td>11699.54</td>
</tr>
<tr>
<td>partial II (zone 2)</td>
<td>6366.82</td>
<td>6795.08</td>
<td>10309.69</td>
<td>23471.59</td>
</tr>
<tr>
<td>active (zone 3)</td>
<td>1 787.99</td>
<td>4181.61</td>
<td>3958.28</td>
<td>9927.88</td>
</tr>
<tr>
<td>buffer</td>
<td>-</td>
<td>2761.76</td>
<td>3805.35</td>
<td>6567.11</td>
</tr>
</tbody>
</table>

2. Forms of nature protection on the Site:

In Białowieża Forest, in the area managed by the Forest Districts, in accordance with the Act of 16 April 2004 on nature protection, various forms of nature protection operate. Tables 7 and 8 below present the areas of particular forms on the site and outside the site. It is worth noticing that individual forms may overlap.

<table>
<thead>
<tr>
<th>Form of nature protection</th>
<th>Białowieża Forest District</th>
<th>Hajnówka Forest District</th>
<th>Browsk Forest District</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature reserves /ha/</td>
<td>4305.05</td>
<td>5606.32</td>
<td>1964.67</td>
<td>11876.04</td>
</tr>
<tr>
<td>Natura 2000 /ha/</td>
<td>12 586.33</td>
<td>16512.26</td>
<td>18073.28</td>
<td>47171.87</td>
</tr>
<tr>
<td>Land under ecological use /ha/</td>
<td>54.32</td>
<td>573.66</td>
<td>47.70</td>
<td>675.68</td>
</tr>
<tr>
<td>Protected landscape area /ha/</td>
<td>12 205.95</td>
<td>16512.26</td>
<td>20418.23</td>
<td>49136.44</td>
</tr>
<tr>
<td>Nature monuments /pieces/</td>
<td>497</td>
<td>484</td>
<td>82</td>
<td>1063</td>
</tr>
</tbody>
</table>

Moreover, the protection zones around bird nests or lichen sites have been established in all Forest Districts. In accordance with the provisions of the Nature Conservation Act, protection zones may be
created to protect the occurrence of plant and animal species under species protection. The area of protection zones on the Site amounts to 2497.08 ha, broken down into individual Forest Districts:
1) Białowieża Forest District – 394.86 ha;
2) Hajnówka Forest District – 596.64 ha;
3) Browisk Forest District – 1504.58 ha.

Table 8. Forms of nature protection (according to the Nature Conservation Act) in the buffer zone in individual Forest Districts

<table>
<thead>
<tr>
<th>Form of nature protection</th>
<th>Białowieża Forest District</th>
<th>Hajnówka Forest District</th>
<th>Browisk Forest District</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature reserves /ha/</td>
<td>-</td>
<td>153.62</td>
<td>-</td>
<td>153.62</td>
</tr>
<tr>
<td>Natura 2000 /ha/</td>
<td>-</td>
<td>2660.09</td>
<td>-</td>
<td>2660.09</td>
</tr>
<tr>
<td>Land under ecological use /ha/</td>
<td>-</td>
<td>19.17</td>
<td>-</td>
<td>19.17</td>
</tr>
<tr>
<td>Protected landscape area /ha/</td>
<td>-</td>
<td>2761.76</td>
<td>3805.35</td>
<td>6567.11</td>
</tr>
<tr>
<td>Nature monuments /pieces/</td>
<td>-</td>
<td>55</td>
<td>3</td>
<td>58</td>
</tr>
</tbody>
</table>

Moreover, protection zones around bird nests or lichen sites have been established in all Forest Districts. In accordance with the provisions of the Nature Conservation Act, protection zones may be created to protect the presence of plant and animal species under species protection. The area of protection zones in the buffer zone amounts to 149.42 ha, including in particular Forest Districts:
1) Białowieża Forest District - 0 ha;
2) Hajnówka Forest District – 149.42 ha;
3) Browisk Forest District - 0 ha.

B. NATURE ASPECT

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

   a. Protection of the bison carried out by State Forests and Białowieża National Park

   European bison is one of the most important species of outstanding universal value (OUV) in the World Heritage Site Białowieża Forest. In September 2019 we celebrated the 90th anniversary of European bison restitution in Poland. The work on saving the species from extinction and restoring it to life in the wild began with bringing the first bison from the zoo in Berlin to a special enclosure in Białowieża Forest on September 19, 1929, which gave rise to a reproduced population.

   On this occasion the European Bison Friends Society under the auspices of the Director of the Regional Directorate of State Forests in Białystok and the Director of Białowieża National Park organized on 5-6 September 2019, an international scientific conference entitled "European bison in remote Białowieża Forest areas". Following that, on 11 September 2019, the Director of Białowieża National Park together with the Director General of State Forests organized in Białowieża a conference on the occasion of the 90th anniversary of European bison restitution.
Currently, the largest herd of bison in Poland and in the world lives in wild in Białowieża Forest. They are a symbol of Polish nature conservation. According to the European Bison Pedigree Book (2018), there are 519 bison at large and 19 in reserve breeding. According to the data from the observation of forest services, over 400 animals of the Białowieża population live in the following Forest Districts: Białowieża, Browsk and Hajnówka.

Despite the undoubted achievements in bison restitution, it should be remembered that the European bison is still an endangered species due to the high affinity of all individuals, and thus susceptibility to various diseases. The bison cannot exist in current natural conditions without special human protection and care. Its 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 needed to save it. Therefore, in cooperation with scientists and Białowieża National Park, Forest Districts implement a number of programs for the protection and conservation of the species. They take part in the annual European bison counting in the Białowieża Forest area coordinated by Białowieża National Park. They also carry out numerous activities in the field of reclamation and management of mid-forest meadows, building feeders, purchasing fodder and feeding.

During the reporting period the following actions were taken:

- Activities concerning the protection of the bison are carried out in the following Forest Districts: Białowieża, Browsk and Hajnówka, in agreement with Białowieża National Park, within the framework of "Comprehensive European bison protection project by the State Forests" financed by the Forest Fund and the project entitled "Comprehensive protection of the bison in Poland" co-financed by the Operational Programme Infrastructure and Environment, Forest Fund and other external financing sources:
  - winter feeding of the bison (purchase of fodder - about 500 tons) and cleaning of winter feeding places;
  - meadow mowing with biomass harvest (about 125 ha);
  - conservation of fruit tree orchards;
  - construction of new hay barracks (5 pieces) and current repairs of existing hay barracks;
  - Forest Districts take part in the annual European bison counting in the Białowieża Forest area coordinated by Białowieża National Park.

b. Active protection of other species and habitats

A very important element of Białowieża Forest ecosystem and its biodiversity are non-forest habitats - mid-forest meadows, swamps and water ecosystems.

- Protective activities resulting from the Conservation Measures Plan drawn up for the area of Natura 2000 Białowieża Forest PLC200004 for the protection and preservation of objects of protection, among others: spotted crake, lesser spotted eagle, newts, rely on:
  - mowing with biomass removal (realized annually on the area of 281 ha),
  - preventing ponds of natural and artificial origin from becoming shallow and overgrown.

The above measures are implemented under the project entitled "Comprehensive project for the protection of species and natural habitats in the areas managed by State Forest co-financed under the Operational Programme Infrastructure and Environment funds and with the use of other financing sources;
• activities concerning the protection of day butterflies, including the maturna (Euphydryas maturna) consist in mowing herbaceous vegetation and removing bushes in an area of 3.44 ha in the Podczerkwa nature reserve. These actions result from the existing reserve protection plan and are aimed at saving a rare butterfly species, which is dying out in the area of the Forest. The task is carried out on the basis of the agreement of 04.04.2019 between the Regional Directorate of Environmental Protection in Białystok and the Białowieża Forest District;

• water retention is very important for the protection of Białowieża Forest area. In 2019, the Browsk Forest District began modernization activities on the artificial water reservoir Gnilec as a part of the project on lowland small retention and drought prevention, financed from external resources. The facility, consisting of two water reservoirs, was built in 1989 and in recent years the technical condition of water damming equipment has been deteriorating. The object is extremely important as it complements the diversified landscape and increases the recreational and tourist values of the region. It is also an important element of biodiversity protection - it is a habitat for numerous plant and animal species. The reservoir also functions as a water retention site, accumulating over 100.000 m³ of water, which is important especially during periods of drought. It should be stressed that the works on the Gnilec reservoir were carried out under environmental supervision, outside the bird breeding period, the period of migration and reproduction of amphibians and the period of spawning and migration of fish. Materials of natural origin are used in the investment (field stone, gravel, crushed stone aggregate).

2. Spruce bark beetle outbreak

The outbreak of insects, including spruce bark beetle, are a natural phenomenon in forest ecosystems and recur in Białowieża Forest. In previous years, active protection measures were carried out, thanks to which the gradations collapsed after a few years and reached relatively small sizes. At present, the highest outbreak is taking place, causing an unprecedented disturbance in the Forest's ecosystem. From 2012 to 30 September 2019, the Forest Services of Forest Districts carried out monitoring showing 1,541,300 spruce trees infested with spruce bark beetle of wood volume of 1,884,000 cubic metres. In 2019, in the period from 1 January to 30 September, 109,400 spruce trees infested with spruce bark beetle of wood volume of 118,500 cubic meters were identified. As a result of the outbreak of the spruce bark beetle, according to the estimates of forest districts employees, spruces died out in an area of 10,714 ha.

3. Anthropogenic hazards:

3a) Infractions - violations revealed by the forest guards on the Site
One of the threats to the World Heritage Site is the violation of law and order, the destruction of property and theft of wood. Forest districts are required to respond to identified violations. During the period in question, the following violations of law were revealed:

a. Theft of wood: 3 cases. A total of 7.80 m³ was stolen. 3.92 m³ was recovered, the rest of the timber was not found.
b. There were 122 interventions related to disturbance of wild animals, dogs let loose, illegal entry of vehicles into the forest, illegal entry into forbidden areas, littering of the forest, lighting fire in places not foreseen for this purpose.

As a result of the interventions, the Forest District guards issued 116 warnings, imposed 14 penal fines, and 2 cases were referred to courts. The littering of forest areas constitutes a serious problem. Forest Districts remove waste from the forest on an ongoing basis and as much as possible. A total of 722 m³ of waste was removed in 2018 and 2019. The cost of cleaning up the waste exceeded PLN 202,000.

*Photo 2. Waste removal from forest areas (photo: Miroslaw Panasiuk)*

3b. Fire hazard

In the nomination application forest fires are considered as one of the most important threats to Białowieża Forest ecosystems. In the area of Forest Districts in Białowieża Forest in 2018 there were 10 fires, and in 2019 to 30 September there were 11 fires. In total, the fire consumed 1.03 ha of forest in 2018 and 2.64 ha in 2019. Against the background of the data from the last 10 years, an increased number of fires than the average is observed - in general it used to be between 0 and 6 fires per year.
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 about forest ecosystems. Knowledge in this area is essential for effective protection of the OUV. Between 2016 and 2018, the State Forests commissioned a number of scientific research projects in the Białowieża Forest area. The research consisted mainly in the identification and inventory of the natural and cultural (archaeological) wealth of Białowieża Forest area. The activities focused on 1391 monitoring areas distributed in a regular grid (650x650 meters). The surface of a single circular area was 400m². The research comprised:

- phytosociological-floristic inventory. In the years 2016-2018, phytosociological measurements were taken in 1,391 circular areas (using the Braun-Blanquet method), the following plant species were searched for in forest compartments: protected, relict, rare and protected under the Habitats Directive and the condition of natural habitats and protected species within the Natura 2000 area was determined. The works were carried out in two pheno logical aspects: in spring and in summer. The studies were carried out on all surfaces annually (6 repetitions in total);

- dendrometric measurements on 1,391 circular surfaces. In the years 2016-2018, live and dead standing trees and lying dead trees (or their fragments) were measured (annually). Moreover, stand descriptions were updated in those forest compartments in which the research plots were located;

- in 2016-2017, soil samples were taken and analysed from different levels of soil profile (5 levels of sampling from 5 locations in the circular area - 25 samples from the area);
• in 2016-2017 about 1,300 Barber traps (half of the surface in one year) were installed to trap a group of diagnostic-important epigeic insects (with special attention to the Carabidae family) mainly for the purpose of determining the SBO index of forest ecosystems.

• In the years 2016-2017, an inventory of saproxylic insects was carried out, with particular emphasis on the species of old and natural forests, protected by the Habitat Directive: Boros Schneideri, Cucujus cinnaberinus, Cucujus haematodes, hermit beetle. The research was carried out in forest compartments in which research plots were located\(^3\);

• inventory of beetle species abundance by means of multi-segment funnel traps; between 2017 and 2018, 663 traps were deployed (based on a network of monitored plots - on average every second plot);

• inventory of the fungi species abundance, with particular emphasis on ectomycorrhizal and endosymbiotic fungi in stands with a high proportion of spruce covered by gradation of spruce bark beetle.

Inventory research not directly related to the circular areas was also performed. It comprised the following inventory works:

• selected species of day butterflies (*Lepidoptera*) - 7 species;

• dragonfly – large white-faced darter;

• amphibians – European fire-bellied toad and Northern crested newt;


• bats with special attention paid to the Western barbastelle (*Barbastella barbastellus*);

• cultural heritage (with particular emphasis on archaeological research) of Bialowieża Forest - the module included search for historical data, analysis of potential valuable sites in terms of cultural heritage, indicated by airplane laser scanning of the area (using NMT, LIDAR and others) and archaeological field research - surveys, geophysical, etc.

The scope of research (species, species groups, elements of inanimate nature) as well as the research methodology were not accidental. The biotic and abiotic elements selected for the inventory were defined in detail in the context of the naturalness of the stands (no influence of human activity over the centuries). Therefore, they were most often indicator species, umbrella species, e.g. so-called relics of primary forests, indicators of natural forests, or old forests, etc.

The results of the above mentioned activities, stemming from the research topics commissioned by the State Forests and the work of the State Forests' experts were presented in partial and final reports on the basis of schedules defined in relevant contracts and at scientific conferences and seminars. The results of

\(^3\) The exception in 2016 was that the inventory of the hermit beetle was carried out on plots "of choice" not connected with the network of monitoring plots - 153 traps.
this research will be presented in the "Report on the State of the Białowieża Forest", summarizing the 3-year period of intensive research in the Białowieża Forest area. The Report is planned for publication at the end of January 2020.

C. SOCIAL ASPECT

1 Firewood for the local community - actions taken by Forest Districts

Due to the inability to provide the local community with access to firewood, Forest Districts have taken steps to prepare information on alternative ways of obtaining firewood. To this end, an analysis of the local market was carried out in terms of companies offering to transport timber from other Forest Districts, the supply of prepared split timber or the possibility of supplying wood processing residues (sawmill residues). Such information is provided to persons who come forward to Forest Districts to purchase firewood. Special information leaflets have also been prepared about the possibility of purchasing wood in other Forest Districts in the area.

These are ad hoc solutions that do not fully meet the needs of the local community. As a result, the level of frustration is still high, which in turn results in a low level of acceptance for the idea of protecting Białowieża Forest as a UNESCO World Heritage Site. A comprehensive (systemic) solution to the problem will be developed after an update on the needs for the amount of firewood and utility wood (e.g. for the renovation of houses, fences and other farm buildings), as part of the UNESCO World Heritage Site Management Plan.

So far, in the only study defining the level of demand for wood in the local community, the analysis of demand, potential and use of raw materials in the region was performed in 2014 by the Poviat Starost's Office in Hajnówka. According to estimates, the demand for firewood in households is almost 146,000 m³ per year. Additionally, according to the research, the estimated annual consumption of wood among the largest processors altogether oscillates around 90,000 m³ per year. Taking into account the current demand (as of 2014), which is estimated at almost 350,000 m³ per year, the volumes planned in the FMP are far from sufficient from the point of view of local demand reported by companies and residents of the Hajnówka district.

In relevant resolutions, the city council of Hajnówka and the councils of several forest communes presented their dissatisfaction with the shortage of firewood and utility wood on the local market.

2 Cooperation with society - building a dialogue (expert meetings)

The Regional Directorate of State Forests in Bialystok, in consultation with the Directorate General of State Forests and the Ministry of Environment, has initiated a dialogue with stakeholders on issues related to Białowieża Forest. To this end, regular expert meetings are organized on issues related to the protection, safety, care and preservation of Białowieża Forest, as well as tourism and economy in the region. The organization of meetings is a response to the demands of various circles involved in the affairs of Białowieża Forest, concerning the need for talks and counteracting harmful disinformation causing social conflicts.
The meetings are carried out in the formula of full balance. 7 places are provided for each of the stakeholder groups, i.e. foresters, scientists, NGOs and representatives of local government. The overriding principle of the meetings is to conduct an orderly discussion across divisions and balance the representation of individual parties. The meetings are to bring together people with different points of view on Białowieża Forest, provide direct access to reliable information and space for substantive discussion.

Photo 4. Expert meeting within the framework of the dialogue with the society (Photo: RDSF in Białystok)

Representatives of the world of science from various scientific circles and positions and representatives of non-governmental organizations, which so far have actively and in various ways joined the discussion on the future of Białowieża Forest have been invited to participate in the dialogue. The presence of local government representatives was equally important. The dialogue was established and is conducted systematically. 6 expert meetings were held until the end of October 2019. NGOs associated in the Coalition "I Love the Forest": WWF Poland Foundation, Greenpeace Poland Foundation, Wild Poland Foundation, ClientEarth Foundation - lawyers for the earth, Greenmind Foundation and the Atelier for All Creatures (Pl. Pracownia na rzecz Wszystkich Istot), despite an invitation to every meeting, did not participate in any of the meetings.

Detailed information on the expert meetings is available at the following website: http://www.bialystok.lasy.gov.pl/spotkania-eksperskie-puszcza-bialowieska

On October 23rd, at the Headquarters of Białowieża National Park, a ceremony inaugurating the celebration of the 40th anniversary of the inclusion of a part of Białowieża Forest - Białowieża National Park on the UNESCO World Heritage List took place. The event was prepared by two managers of the Polish part of the site – of Białowieża National Park and the Regional Directorate of
State Forests in Białystok together with the Forest Districts Białowieża, Browsk and Hajnówka. The ceremony was accompanied by the opening of two exhibitions - sculptures by Józef Wilkoń and archival photographs by Professor Jan Jerzy Karpinski. The ceremony was held under the Honorary Patronage of the Minister of the Environment, Minister of Sport and Tourism, Polish Committee for UNESCO, National Heritage Institute, General Director of Environmental Protection and General Director of State Forests.

3 Tourism in the site:
   - infrastructure
Ongoing measures are taken in the Forest Districts to maintain the existing infrastructure for tourists such as hiking, cycling, Nordic Walking, parking and parking places, shelters, resting places, viewpoints, etc.
In 2018, a car park at the Białowieża-Piererow border crossing was opened, which is an important element making it easier for tourists to visit the Belarusian part of the Białowieża Forest World Heritage Site.
   - increase in the tourist traffic volume in the period 01 July 2018 - 30 September 2019,
   - forest districts do not keep statistics and do not have the tools to accurately determine the volume of tourism in a given period. A very strong seasonality of traffic is observed, especially during summer holidays and holiday periods there is an accumulation of people visiting the Forest.
   - the only place where the number of tourists can actually be determined is the narrow-gauge railway in the Hajnówka Forest District, where 287 trips were organized in the aforementioned period, carrying 25,600 tourists.
- events:

Photo 5. Sports competitions *(Photo: Hajnówka Forest District)*

Forest Districts organize or participate in numerous events aimed at increasing tourist values, attracting as many tourists as possible and activating local community. The events have varied size and scope, they are organized independently or in cooperation with Białowieża National Park, scientific entities, local governments and non-governmental organizations. It is an excellent opportunity to promote the Białowieża Forest region and UNESCO World Heritage Site.

During the discussed period, Forest Districts organized, co-organized or participated in numerous picnics and festivals, competitions or nature olympics. During the events Forest Districts promoted the area of Białowieża Forest both in terms of its OUV as the UNESCO World Heritage Site as well as cultural values. These events were addressed both to the region's residents and tourists visiting the Forest.

There are also recurring actions for residents and tourists related to, among others, forest cleaning, tree planting, winter feeding of birds, recognition and learning of owl biology. Often forest districts take part in supra-regional events in Białystok or national events in Warsaw, such as the ecological picnic in Białystok or bison days at the Warsaw Zoo.

- **badge of the Polish Tourist and Sightseeing Society:**
Foresters cooperate with tourist organizations in order to promote Białowieża Forest. In 2019, as part of the cooperation with the Polish Tourist and Sightseeing Society (PTTK), the scope of the UNESCO World Heritage Trail tourist badge in Poland was extended to the whole Białowieża Forest.

Photo 6. (Photo: Bartłomiej Wiżynis) One of the events promoting Białowieża Forest, Warsaw.

The badge was established in 2008 by the Intercollegiate Branch of the Polish Tourist and Sightseeing Society in Warsaw on the occasion of the thirtieth anniversary of the inclusion of the first Polish Sites on the UNESCO World Cultural and Natural Heritage List. The aim of the badge is to popularize tourism and sightseeing as well as the system of badges of PTTK (Polish Tourist and Sightseeing Society), and in particular Polish sites inscribed on the UNESCO World Heritage List.
4 Education

The educational activities of the forest districts are primarily aimed at school children and young people. The theme of the classes is to bring closer the native nature and forestry with particular emphasis on the values of Białowieża Forest and their protection. An important element of the message is the promotion of the UNESCO World Heritage Site.

![Photo 7. Educational stand (Photo: Łukasz Ławrys)](image)

A total of 612 different types of classes were conducted in the discussed period (from 1 July 2018 to 30 September 2019) (including: Białowieża - 132; Hajnówka - 245; Browsk - 235). They included field lessons and excursions, lessons in the Forest Education Chamber, meetings with the forester in schools, kindergartens and other cultural and educational centres. Various forms of education covered
32580 people (including: Białowieża – 18,520 people, Hajnówka – 9,790 people, Browsk – 4,270 people). In the given period, 95 employees of particular forest districts were engaged in forest education of the society (including 27 employees of the Białowieża Forest District, 43 employees of the Hajnówka Forest District and 25 employees of the Browsk Forest District).

**Information on transboundary cooperation between Poland and Belarus**

In 2018 and 2019 the activities of the partners of the UNESCO World Heritage Białowieża Forest in the field of transboundary cooperation included the participation in the sittings of the Scientific Council of Białowieża National Park and the National Park Belovezhskaya Pushchha and the participation in the sittings of the Polish-Belarusian Working Group on Transboundary World Heritage Site Białowieża Forest.

In view of the need to support and strengthen multilateral cooperation for the World Heritage Site, the State Forests initiated work on the concept of tripartite cooperation: Belovezhskaya Pushchha National Park (Belarus) - Białowieża National Park - State Forests. International workshops took place on 24-25 January and 13-15 February 2019. Their aim was to develop a concept aimed at developing tourism, education and promotion of the UNESCO World Heritage Site Białowieża Forest. The workshop was attended by representatives of all Site managers from Poland and Belarus. The effect of the International workshops was a weeklong Festival of Science and Nature "Week with Białowieża Forest". For 7 days Forest Districts, Białowieża National Park and local governments organized numerous events to promote knowledge about the World Heritage Site Białowieża Forest, especially about its natural and cultural values and allowing close encounters with nature. The Festival included lectures, presentations, thematic walks in the forest (mushroom picking with an expert, a visit to a red deer rut, a visit to the Strict Protection Zone "Reserve" in Białowieża National Park), a summer cinema with films about the nature and many other attractions. The event received patronage of the Polish UNESCO Committee. Detailed information about the events can be found at the following website: https://tydzienzpuszczabialowieska.pl/

The scientific institutions and Institutions responsible for nature conservation in Poland and Belarus prepared and presented a project under the EU Life + programme which concerned of an integrated transboundary system for comprehensive monitoring of ecosystems.

The Belovezhskaya Pushchha National Park and the State Forests National Forest Holding organized 24 visits by groups of employees (more than 700 persons) to become mutually familiar with and exchange experiences in the conservation of the forests of Białowieża Forest.

At the initiative of Polish Academy of Science and National Academy of Science of Belarus in October 2019 a meeting was held in Warsaw with the participation of the representatives of National Parks and scientific organizations of both countries, who discussed the problems and worked out concepts of joint research in Białowieża Forest (optimization of water regimes, elaboration of joint management plans for species protection, incising the sustainability of forest in the conditions of climate change).
An exchange of operating information was organized between forest services of the Belovezhskaya Pushcha National Park, the Forest Districts of Polish part of Białowieża Forest and the Białowieża National Park (fires and other threats to forest).

In order to facilitate the mutual cooperation the duration of visa-free stay in Belarusian part of the World Heritage Site was extended to 15 days (by Regulation No 300 of the President of the Republic of Belarus of 7 August 2019 establishing a visa-free procedure for entries and exits of foreign nationals).

3.3 “Belovezhskaya Pushcha” National Park

The state of preservation of the Belarusian part of the UNESCO World Heritage Site (WHS) - Białowieża Forest.

The area of the Belarusian part of the World Heritage Site is 82,306 ha.

In 2019, activities aimed at restoring the hydrological system were carried out on the World Heritage Site and its protected zone:

- in the drained part of the Dikoje Marsh (a wetland area included in the Ramsar Convention list) 25 dams damming up water in an area of 330 ha were built;
- the meandering of the riverbed of the previously regulated Solomionka river was reconstructed over the length of 3.2 km;
- a scientific base for reconstruction of the natural transboundary riverbed of the Narewka River was developed;
- a scientific base for the reconstruction of the Zubrica and Blota Galewo marshes in an area of 616 ha was developed;
- a scientific base for improvement of the hydrological system on the site “Żarkowszczyzna Canal Network” in the area of 1,227 ha was developed.

Forest management activities on the World Heritage Site

Actions to clean up the narrow forest aisles at compartments and remove hazardous trees are carried out throughout the World Heritage Site, leaving the timber within the reserve and [other] sensitive areas.

The forest logging in the Belarusian part of the World Heritage Site in 2019 was implemented in 2,217 ha with 25,352 m³ cut. The purpose of the cuttings implemented in zones 0, 1 and 2 was to ensure safety, including fire safety, along roads and tourist trails and no wood was removed. Wood was removed from zone 3 in an amount of 20,635 m³.

In 2019, a ground fire in an area of 15.2 hectares was reported on the World Heritage Site.

In 2019, in the National Park an inventory was made of the spread of plant species belonging to dangerous invasive species. In the protected area of the Site, the area of spread of these species (Sosnowsky's hogweed, Canadian goldenrod) is 211 ha. Measures have been taken to combat these and other aggressive plant species of foreign origin.
Data on recreation within the World Heritage Site: the number of visitors to the national park in 2019 was 430,000, but most of them only visited the Museum of Natural History and the animal viewing aviaries, which are located within the World Heritage Site protected area. The number of visitors on hiking and biking trails in 2019 is calculated at around 24 thousand.

In accordance with the approved plan of scientific and technical work, the following eight chapters of "Scientific bases for environment protection activities and stable management of Białowieża Forest resources" (2016 – 2020) were implemented in 2019:

- investigating the uniqueness of succession and mutation processes in forest formations with different modes of protection of natural complexes;
- evaluation of the current state and dynamics of long-term wild ungulates, including the European bison in Białowieża Forest;
- population and biological uniqueness of rare plant species and actions for their protection;
- study on the species diversity and structural regularity of the organization of the communities of birds nesting in hollows in the forest ecosystems in Białowieża Forest;
- study of the impact of economic activities carried out in the area of Białowieża Forest on the state of the populations of Coleoptera insects included in the Red Book of the Republic of Belarus;
- developing practical recommendations for the improvement and development of tourism;
- inventory of material objects in the historical and cultural landscape of Białowieża Forest;

Within the framework of the implementation of measures from the state programme "Environmental protection and stable management of natural resources", scientific research was carried out on the issue of "Creation of a comprehensive automated geoinformation system using data obtained from space-based devices and other sources".

Moreover, within the framework of the nature protection programme in Białowieża Forest, the following research was conducted on the World Heritage Site:

- Creation of a network for long-term comprehensive monitoring of plantings damaged by uprooted trees;
- Analysis of the variability of the fauna of the Coleoptera insects (Insecta, Coleoptera) in the stands damaged by the wind and the spruce bark beetle in the area of the Belovezhskaya Pushcha National Park under conditions of diversified management;
- Study of the current state of the population of the badger Meles meles and its spread in the area of the Belovezhskaya Pushcha National Park;
- Study of the migration of greater spotted eagles nesting in the area of the Belovezhskaya Pushcha National Park by means of GSM transmitters;
- Investigating the radio-track of bats in the Belovezhskaya Pushcha National Park.
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.

6 Signature of the Authorities

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