Articles

Studia Iuridica Lublinensia vol. 32, 5, 2023
DOI: 10.17951/sil.2023.32.5.217-238

Zbigniew R. Kmiecik
Maria Curie-Skłodowska University (Lublin), Poland
ORCID: 0000-0002-1066-0075
zbigniew.kmiecik@mail.umcs.pl

Marzena Furtak-Niczyporuk
Medical University of Lublin, Poland
ORCID: 0000-0003-2444-6456
marzenafurtakniczyporuk@umlub.pl

Grzegorz Grzywaczewski
University of Life Sciences in Lublin, Poland
ORCID: 0000-0003-1136-0768
grzegorz.grzywaczewski@up.lublin.pl

Ignacy Kitowski
University College of Applied Sciences in Chełm, Poland
ORCID: 0000-0001-8308-5588
ignacyk@autograf.pl

Białowieża Primaeval Forest – a Conflict between the Polish Government and the European Commission

Puszcza Białowieska – konflikt rządu polskiego z Komisją Europejską

CORRESPONDENCE ADDRESSES: Zbigniew R. Kmiecik, PhD, Prof. Dr. Habil., Full Professor, Maria Curie-Skłodowska University (Lublin), Faculty of Law and Administration, Institute of Legal Sciences, Maria Curie-Skłodowska Square 5, 20-031 Lublin, Poland; Marzena Furtak-Niczyporuk, PhD, Dr. Habil, University Professor, Medical University of Lublin, Faculty of Medicine, Department of Public Health, W. Chodźki 1, 20-093 Lublin, Poland; Grzegorz Grzywaczewski, PhD, Dr. Habil., University Professor, University of Life Sciences in Lublin, Faculty of Environmental Biology, Department of Zoology and Animal Ecology, Akademicka 13, 20-950 Lublin, Poland; Ignacy Kitowski, PhD, Dr. Habil., University Professor, University College of Applied Sciences in Chełm, Institute of Human Nutrition and Agriculture Sciences, Pocztowa 54, 22-100 Chełm, Poland.

ABSTRACT

The article describes the natural background, the origin, the course and the outcome of the dispute between Poland and the European Commission which was going on in the years 2016–2018 regarding the forest management performed in the Białowieża Forest. The dispute took place on two interrelated levels: natural and legal. The main axis of the dispute between the Polish government and the European Commission was the difference of views as to what actions would prove effective in the fight against the latest gradation of the bark beetle, which occurred with exceptional intensity in the Białowieża Forest in 2015, and what actions would be most beneficial in the context of preserving rare species of birds and insects that make up the fauna of the Białowieża Forest. The article presents extensively the arguments raised by both parties to the conflict in the proceedings before the Court of Justice of the European Union, which were initiated by a complaint filed by the European Commission. As a commentary on these arguments, the views expressed in the scientific literature as to the proper reaction in response to a recurrent infestation of the bark beetle, usefulness and efficacy of the active forest management operations questioned by the European Commission, as well as an impact of these operations on the conservation of natural habitats, insects and birds are presented. The legal dimension of the dispute boiled down to the question of what actions in the situation were allowed, required or prohibited under Polish and EU law.

Keywords: forest management; Białowieża Forest; bark beetle; conservation of natural habitats; European Commission

INTRODUCTION

The transformation of the socio-political and economic system that Poland underwent in the late 1980s and the early 1990s has brought a number of positive changes both in terms of protection of human environment and natural resources, as well as ecological awareness of Polish society. However, the development of free economy has led to an increase in multi-dimensional economic pressure on renewable and non-renewable environmental resources, in particular forest resources.[1] There had been concepts proposing extensive privatisation of forests, which in Poland are mainly state-owned,[2] but luckily these were rejected, which

[1] L. Pawłowski, M.R. Dudzińska, *Environmental Problems of Poland during Economic and Political Transformation*, "Ecological Engineering" 1994, vol. 3(3), pp. 207–215; J. Clark, D.H. Cole, *Environmental Protection in Transition: Economic, Legal and Socio-Political Perspectives on Poland*, London 2017, passim; G. Grzywaczewski, I. Kitowski, *Poland's Conflicting Environmental Laws*, "Science" 2019, vol. 365, no. 6449, p. 134; eidem, *The Ecosystems of Large Unregulated Rivers of Central Europe Are under Pressure*, "Oryx" 2019, vol. 53(4), pp. 608–609.

[2] P. Jasiński, *Pro-Ecological Privatisation? Ownership Changes and Natural Environment in Poland, 1989–1994*, "Communist Economies and Economic Transformation" 1996, vol. 8(3), pp. 335–362; A. Lawrence, *Forestry in Transition: Imperial Legacy and Negotiated Expertise in Romania and Poland*, "Forest Policy and Economics" 2009, vol. 11(5–6), pp. 429–436.

was caused, among other things, by the poor reception in the country of the partial privatisation of forests in neighbouring Lithuania.[3]

Taking into account environmental and social needs, it is possible in Poland to manage environmentally valuable areas on the principles of sustainable development. Socio-economic development in such areas is possible through the "greening" of the economy, primarily in such branches as agriculture, tourism or forestry. In the case of Natura 2000 sites, nature conservation law may restrict economic activity, including forest management.[4]

Natura 2000 areas are the European Ecological Network, the aim of which is to protect endangered animal and plant species and natural habitats, while the legal basis for their protection are EU directives, which are briefly referred to as the Birds Directive[5] and the Habitats Directive.[6] The aim of this form of nature conservation is to protect biodiversity – species and, in a broader context, entire ecosystems. However, nature protection at the interface with economic use may in some cases give rise to problems and even conflicts.[7]

In Poland, the largest conflict of this type was the dispute over the manner of forest management in the Białowieża Forest, which in 2016–2018 took on the features of a multidimensional socio-political conflict, characterized by a very strong polarization of social opinions, the involvement of local non-governmental organizations and international organizations focusing on the nature conservation.[8]

---

[3] See M. Lazdinis, A. Pivoriūnas, I. Lazdinis, *Cooperation in Private Forestry of Post-Soviet System: Forest Owners' Cooperatives in Lithuania*, "Small-Scale Forest Economics, Management and Policy" 2005, vol. 4(4), pp. 377–389; M. Teder et al., *Structural Changes of State Forest Management Organisations in Estonia, Latvia, Lithuania, Serbia and Slovakia Since 1990*, "Baltic Forestry" 2015, vol. 21(2), pp. 326–339.

[4] A. Zielińska, *Rozwój społeczno-gospodarczy na obszarach chronionych*, "Zeszyty Naukowe Uniwersytetu Szczecińskiego. Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania" 2014, no. 3, pp. 157–166; B. Mastalska-Cetera, P. Krajewski, *Obszary Natura 2000 jako uwarunkowanie planowania rozwoju regionalnego*, "Studia KPZK" 2015, no. 161, pp. 148–155.

[5] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20/7, 26.1.2010) amended by Council Directive 2013/17/EU of 13 May 2013 adapting certain directives in the field of environment, by reason of the accession of the Republic of Croatia (OJ L 158/193, 10.6.2013), hereinafter: the Birds Directive.

[6] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206/7, 22.7.1992), amended by Council Directive 2013/17/EU of 13 May 2013, hereinafter: the Habitats Directive.

[7] See, e.g., A. Namura-Ochalska, *Natura 2000 w lasach – ochrona różnorodności biologicznej*, "Studia i Materiały Centrum Edukacji Przyrodniczo-Leśnej" 2010, vol. 12(2), pp. 275–291; P. Chylarecki, N. Selva, *Ancient Forest: Spare It from Clearance*, "Nature" 2016, vol. 530, p. 419; P. Michalak, *Ancient Forest: Keep the Logging Ban*, "Nature" 2016, vol. 530, p. 419; D. Zastocki, H. Lachowicz, J. Sadowski, T. Moskalik, M. Nietupska, *Pozyskanie drewna w nadleśnictwach Puszczy Białowieskiej w latach 2008–2015*, "Sylwan" 2018, no. 162, pp. 941−948.

[8] J. Szulecka, K. Szulecki, *Between Domestic Politics and Ecological Crises: (De)legitimization of Polish Environmentalism*, "Environmental Politics" 2022, vol. 31(7), pp. 1214–1243.

In this study, we present the origins, course and legal resolution of the conflict between the European Commission and Poland over the Białowieża Forest, and specifically about the manner of forest management in the context of the spread of spruce bark beetle (*Ips typographus*). The aim of the study is to present the legal and environmental dimensions of the dispute, without addressing political issues.

THE BIAŁOWIEŻA PRIMAEVAL FOREST AS A NATURA 2000 AREA

A peculiar Natura 2000 area in Poland is the Białowieża Primaeval Forest (PLC200004), which is an integrated area of Special Protection Area and Special Area of Conservation (Podlasie region, East Poland) within a dense forest complex on an area of 63,148 ha. The area is dominated by deciduous forests, mainly *Tilio-Carpinetum* oak-hornbeam forests, with a high proportion of old trees and natural stands.

Part of the Natura 2000 area of the Białowieża Forest is protected as the Białowieża National Park. The area is also a UNESCO transboundary reserve – the Białowieża Biosphere Reserve. It is also a bird sanctuary of a European rank (E 31), where about 240 bird species have been found, of which at least 45 species are birds from Annex I of the Birds Directive and 12 species are those listed in the "Polish Red Data Book of Animals". The most important bird species of the area are: three-toed woodpecker (Picoides tridactylus), white-backed woodpecker (*Dendrocopos leucotos*), middle spotted woodpecker (*Dendrocopos medius*), Eurasian pygmy owl (*Glaucidium passerinum*), collared flycatcher (*Ficedula albicollis*), red-breasted flycatcher (*Ficedula parva*), nightjar (*Caprimulgus europaeus*), honey buzzard (*Pernis apivorus*), hazel grouse (*Tetrastes bonasia*), black stork (*Ciconia nigra*), lesser spotted eagle (*Clanga pomarina*), and stock dove (*Columba oenas*). The Białowieża Forest is also the refuge of European bison (*Bos bonasus*), wolf (*Canis lupus*), lynx (*Lynx lynx*), and many other valuable mammals,[9] and recently also the brown bear (*Ursus arctos*). Due to its unique character, as much as approx. 80% of the area's forests are covered by forest habitats listed in Annex I of the Habitats Directive. However, 39 animal species are included in Annex II to the Habitats Directive, including insects (saproxylic beetles): wrinkled bark beetle (*Rhysodes sulcatus*), goldstreifiger (*Buprestis splendens*), false darkling beetle (*Phryganophilus ruficollis*), *Boros schneideri*, *Cucujus cinnaberinus* and *Pytho kolwensis*. Moreover, there are many other protected, rare and endangered species of plants and fungi in this area.

The Białowieża Forest, due to its extensive area and type of forest stands, provides also other ecosystem services. The filtration and detoxification function of the Białowieża Forest is particularly important for people, as it cleans the air of its

[9] B. Jędrzejewska, W. Jędrzejewski, *Predation in Vertebrate Communities: The Bialowieża Primeval Forest as a Case Study*, "Ecological Studies" 1998, vol. 135, passim.

industrial and transport-related pollutants, such as dusts, gases and heavy metals. The amount of carbon dioxide absorbed from the atmosphere by forests in Poland (including the use and absorption of gas by soils) is estimated at 36.5 million tonnes per year.[10] Studies confirm the significant physiological effect of the forest atmosphere on human health.[11] This effect is achieved by inhaling the air, which includes various phytochemicals mainly produced by trees.[12]

THE PROBLEM OF OCCURRENCE OF EUROPEAN SPRUCE BARK BEETLES IN THE BIAŁOWIEŻA FOREST

The occurrence of European spruce bark beetles (Ips typographus) is considered to be a permanent and integral element of the functioning of forest ecosystems dominated by European spruce.[13] Under appropriate conditions of ecological balance, spruce bark beetles act as a natural spruce selection factor eliminating sick and weak trees. At the same time, as a result of reduced immunity in trees or a rapid increase in the beetle population, these insects, instead of being the secondary selection factor, may become the primary factor, attacking healthy trees.[14] Overrunning healthy trees is caused by a decrease in their immunity or a sudden increase in the population of beetles. This happens in warm and dry periods when there is a shortage of water.[15] When bark beetle infestations cover a large area and have large intensity, it be-

[10] A. Olecka et al., *Poland's National Inventory Report*, Warszawa 2018, passim.

[11] C. Song, H. Ikei, Y. Miyazaki, *Physiological Effects of Nature Therapy: A Review of the Research in Japan*, "International Journal of Environmental Research and Public Health" 2016, vol. 13(8), pp. 1–17; D.J. Nowak, S. Hirabayashi, A. Bodine, E. Greenfield, *Tree and Forest Effects on Air Quality and Human Health in the United States*, "Environmental Pollution" 2014, vol. 193, pp. 119–129; B.J. Park, Y. Tsunetsugu, T. Kasetani, T. Kagawa, Y. Miyazaki, *The Physiological Effects of Shinrin-Yoku (Taking in the Forest Atmosphere or Forest Bathing): Evidence from Field Experiments in 24 Forests across Japan*, "Environmental Health and Preventive Medicine" 2010, vol. 15, pp. 18–26.

[12] Y. Tsunetsugu et al., *Physiological Effects of Shinrin-Yoku (Taking in the Atmosphere of the Forest) in an Old-Growth Broadleaf Forest in Yamagata Prefecture, Japan*, "Journal of Physiological Anthropology" 2007, vol. 26(2), pp. 135–142; K.S. Cho et al., *Terpenes from Forests and Human Health*, "Toxicological Research" 2017, vol. 33, pp. 97–106.

[13] J. Michalski, J.R. Starzyk, A. Kolk, W. Grodzki, *Zagrożenie świerka przez kornika drukarza Ips typographus L. w drzewostanach leśnego kompleksu promocyjnego „Puszcza Białowieska" w latach 2000–2002*, "Leśne Prace Badawcze" 2004, no. 3, pp. 5–30; W. Grodzki, *Mass Outbreaks of the Spruce Bark Beetle Ips typographus in the Context of the Controversies around the Białowieża Primeval Forest*, "Forest Research Papers" 2016, vol. 77, pp. 324–331.

[14] P. Baier, *Defence Reactions of Norway Spruce (Picea Abies Karst.) to Controlled Attacks of Ips typographus (L.) (Col., Scolytidae) in Relation to Tree Parameters*, "Journal of Applied Entomology" 1996, vol. 120(1–5); B. Wermelinger, *Ecology and Management of the Spruce Bark Beetle Ips typographus – a Review of Recent Research*, "Forest Ecology and Management" 2004, vol. 202(1–3), pp. 67–82.

[15] *Ibidem*.

comes a problem for forest management. One of the economic methods that limit the size of the spruce bark beetle population is the removal of trees (infested dead wood) in which these insects develop.[16] In Polish conditions, the dispute over the extent of the impact of spruce bark beetles on the Białowieża Forest has gained an ideological dimension in relations between foresters and ecological campaigners as regards the identification of what to protect in the Białowieża Forest. There is a thesis that the containment of mass spread of spruce bark beetles by removing spruces will be ineffective, but constitutes an excuse to increase timber harvesting.[17] Also, logging of affected trees does not result in limiting the beetles' spread, because it is only effective if at least 80% of the trees are identified and removed before the beetles leave them. Then it also effectively affects the wintering forms of these insects. However, due to restrictions related to the protection of nature in the Białowieża Forest (including a large number of nature reserves), it is not possible to successfully carry out this type of treatment.[18]

There was also an opinion on the recent disintegration of spruce stands, referring to it as a disaster.[19] According to others, this is not a disaster, because similar situations used to happen before, e.g. in the 1920s, when there were even higher losses suffered by such stands.[20] Moreover, the current high bark beetle spread results also from intense plantings and the resulting even-aged spruce stands. Another argument is that there is spontaneous regeneration in gaps left after dead trees, combined with the growth of a large number of saplings of spruce. There are also opinions, according to which leaving dead, unremoved trees will eventually result in the disappearance of spruce in the Białowieża Forest.[21] This argument is

[16] J. Michalski, J.R. Starzyk, A. Kolk, W. Grodzki, *op. cit.*, pp. 5–30; W. Grodzki, *op. cit.*, pp. 324–331.

[17] P. Pawlaczyk, *Martwe drzewa w ochronie żywej przyrody*, [in:] *Stan ekosystemów leśnych Puszczy Białowieskiej. Ogólnopolska Konferencja Naukowa Ministerstwa Środowiska i Dyrekcji Generalnej Lasów Państwowych*, eds. M. Ksepko et al., Warszawa 2016, pp. 59–86; T. Wesołowski et al., *Spór o przyszłość Puszczy Białowieskiej: mity i fakty. Głos w dyskusji*, "Chrońmy Przyrodę Ojczystą" 2016, no. 2, pp. 83–99.

[18] J.M. Gutowski, L. Krzysztofiak, *Directions and Intensity of Migration of the Spruce Bark Beetle and Accompanying Species at the Border between Strict Reserves and Managed Forests in North-Eastern Poland*, "Ecological Questions" 2005, vol. 6, pp. 81–92; W. Grodzki, *op. cit.*, pp. 324–331; P. Pawlaczyk, *op. cit.*, pp. 59–86; L. Kasumović, Å. Lindelöw, B. Hrašovec, *Overwintering Strategy of Ips typographus L. (Coleoptera, Curculionidae, Scolytinae) in Croatian Spruce Forests on Lowest Elevation*, "Šumarski List" 2019, vol. 143(1–2), pp. 19–24.

[19] T. Wesołowski et al., *op. cit.*, pp. 83–99.

[20] B. Brzeziecki et al., *Problem masowego zamierania drzewostanów świerkowych w Leśnym Kompleksie Promocyjnym „Puszcza Białowieska"*, "Sylwan" 2018, no. 162, pp. 373–386; Z. Sierota, W. Grodzki, A. Szczepkowski, *Abiotic and Biotic Disturbances Affecting Forest Health in Poland Over the Past 30 Years: Impacts of Climate and Forest Management*, "Forests" 2019, vol. 10, pp. 1–17.

[21] B. Brzeziecki, A. Pommerening, S. Miścicki, S. Drozdowski, H. Żybura, *A Common Lack of Demographic Equilibrium among Tree Species in Bialowieża National Park (NE Poland): Evidence from Long-Term Plots*, "Journal of Vegetation Science" 2016, vol. 27(3), pp. 460–469.

opposed by the view of the impact of climate, which, if remains unchanged, will allow the continued occurrence of spruce.[22] Moreover, the only current problem with this tree species is the disappearance of as little as 10% of the spruce population. The issue of the disappearance of the forest without human intervention was also considered.[23] This hypothesis is opposed by the claim that the current economic model was only introduced more than 100 years ago by German occupiers of Poland.[24] Previously, the original forest functioned without interference, which is why it will continue to exist without the need for maintenance procedures. Based on this claim, a view was formulated that the Białowieża Forest would continue as long as the trees in the area are allowed to naturally die, and young trees to grow without any intervention. It is being pointed out that a primaeval natural forest is more important than a commercially exploited forest.[25]

The dispute took on a political dimension due to the complaint about inappropriate actions of the previous management of the Polish Ministry of the Environment (holding the offices in 2008–2015). The counterargument to such an allegation is the claim that decisions on the functioning of a forest are taken 50 or 100 years earlier. Another issue is the waste of many cubic meters of dead spruce and rotting of wood in the forest.[26] However, dead wood is a key factor for many organisms, including many protected species.[27] Other authors point to the need to adapt forest management to nature conservation, but also adapt active and passive methods of protection of different species of organisms.[28] To maintain correct biodiversity,

[22] R. Seidl et al., *Small Beetle, Large-Scale Drivers: How Regional and Landscape Factors Affect Outbreaks of the European Spruce Bark Beetle*, "Journal of Applied Ecology" 2016, vol. 53, pp. 530–540.

[23] T. Wesołowski et al., *op. cit.*, pp. 83–99.

[24] *Ibidem*.

[25] *Ibidem*.

[26] A. Bobiec, E. Jaszcz, K. Wojtunik, *Oak (Quercus Robur L.) Regeneration as a Response to Natural Dynamics of Stands in European Hemiboreal Zone*, "European Journal of Forest Research" 2011, vol. 130(5), pp. 785–797; A. Bobiec, M. Bobiec, *Wpływ masowego zamierania świerka w drzewostanach Białowieskiego Parku Narodowego na odnowienie naturalne dębu*, "Sylwan" 2012, no. 156, pp. 243–251; A. Bobiec, *What Is the Use of the Research Carried Out on the Permanent Plots in the Białowieża National Park?*, "Forest Research Papers" 2016, vol. 77, pp. 296–301; A. Bobiec et al., *Dlaczego martwe świerki są potrzebne w Puszczy Białowieskiej?*, "Las Polski" 2016, no. 7, pp. 14–16; B. Brzeziecki et al., *op. cit.*, pp. 373–386.

[27] T. Wesołowski, *The Breeding Ecology and Behaviour of Wrens Troglodytes troglodytes under Primaeval and Secondary Conditions*, "Ibis" 1983, vol. 125(4), pp. 499–515; idem, *Primeval Conditions – What Can We Learn from Them?*, "Ibis" 2007, vol. 149(2), pp. 64–77; P.L. Angermeier, *The Natural Imperative for Biological Conservation*, "Conservation Biology" 2000, vol. 14, pp. 373–381; M. Kuboń et al., *Searching for Solutions to the Conflict Over Europe's Oldest Forest*, "Conservation Biology" 2019, vol. 33(2), pp. 476–479.

[28] K. Niedziałkowski et al., *Effective Mitigation of Conservation Conflicts and Participatory Governance: Reflections on Kuboń et al.*, "Conservation Biology" 2019, vol. 33(4), pp. 962–965; J. Szulecka, K. Szulecki, *op. cit.*, pp. 1214–1243.

a varied conservation strategy should be introduced in the Białowieża Forest.[29] Other data show that after the occurrence of large spruce bark beetle spreads, an increased density of trees and their regeneration in the long term has occurred. It is therefore concluded that natural regeneration can be considered one of the most effective ways of regenerating forests destroyed by bark beetle spruce.[30]

BACKGROUND OF THE CONFLICT BETWEEN POLAND AND THE EUROPEAN COMMISSION

In June 2011, seven non-governmental organizations of lawyers, naturalists and activists (ClientEarth, Dzika Polska, Greenmind, Greenpeace Polska, WWF Polska, Ogólnopolskie Towarzystwo Ochrony Ptaków, and Pracownia na rzecz Wszystkich Istot) sent an application to the European Commission, as a result of which the Commission initiated a pre-infringement investigation regarding forest management in the Białowieża Forest (EU Pilot File No. 2210/11/ENVI). In response to this action, in May 2012, the Minister of Environment issued a recommendation to exclude from economic operations stands that were over a hundred years old, and in October of the same year he approved the Forest Management Plan (Pol. *plan urządzenia lasu*) for 2012–2021 for the forest districts of Białowieża, Browsk and Hajnówka, which included environmental impact forecasts. The plan reduced timber harvesting approved for these three forest districts to around 470,000 m^3 in ten years, which was a reduction of more than two-thirds compared to timber harvested in 2003–2012. For the Białowieża Forest District, this limit was defined at 63,471 m^3.[31]

However, due to massive logging that took place in the years 2012–2015, the maximum quantity approved in the plan for a period of ten years was achieved in the Białowieża Forest District in almost four years. At the same time, an increased spruce bark beetle spread was found during this period.[32]

In this situation, by decision of 25 March 2016 upon the request of the General Director of State Forests, the Minister of Environment Jan Szyszko approved an appendix to the Forest Management Plan of 2012, increasing the permissible amount of timber to harvest in the Białowieża Forest District from 63,471 m^3 to 188,000 m^3,

[29] J. Hilszczański, T. Jaworski, *Ochrona bioróżnorodności Puszczy Białowieskiej w kontekście dynamiki naturalnych i sztucznych zaburzeń*, "Sylwan" 2018, no. 162, pp. 927–932.

[30] T. Zeppenfeld et al., *Response of Mountain Picea Abies Forests to Stand-Replacing Bark Beetle Outbreaks: Neighbourhood Effects Lead to Self-Replacement*, "Journal of Applied Ecology" 2015, vol. 52(5), pp. 1402–1411.

[31] Cf. Opinion of Advocate General Yves Bot delivered on 20 February 2018 in case C-441/17, *European Commission v. Republic of Poland*, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CC0441&from=EN (access: 31.4.2023), paras 28–31 (hereinafter: the Opinion).

[32] Cf. para. 32 of the Opinion.

as well as the area for afforestation and renewal from 12.77 ha to 28.63 ha in 2012–2021. The request of the General Director was justified by the occurrence of damage to spruce stands as a result of the ongoing spruce bark beetle spread, and the need to maintain adequate sanitary condition of forests, stop the degradation and start the regeneration process of natural habitats, including those important for the EU.

In the meantime, in November 2015, the Regional Director for Environmental Protection in Bialystok adopted the Protective Task Plan (Pol. *plan zadań ochronnych*, PZO), which defined the protection objectives and protective actions regarding the Natura 2000 area of the Białowieża Forest in the forest districts of Białowieża, Browsk and Hajnówka.[33]

In February 2017, the Director General of the State Forests issued a decision on the removal of trees infested by spruce bark beetles and the logging of trees constituting a threat to public safety and posing a fire risk in all age classes of forest stands in the Białowieża, Browsk and Hajnówka Forest Districts.[34]

AN APPLICATION OF THE EUROPEAN COMMISSION TO THE COURT OF JUSTICE OF THE EUROPEAN UNION AND ITS REPERCUSSIONS

After receiving information about the approval of the 2016 annex and exhausting the procedure provided for in the Treaty on the Functioning of the EU, on 4 July 2017 the European Commission decided to bring an action against Poland to the Court of Justice of the European Union (CJEU).

In the application, the Commission raised four charges of breaching by the Republic of Poland its obligations under the EU Habitats Directive and the EU Birds Directive. These partially overlapping charges boiled down to the fact that, firstly, an appendix to the Forest Management Plan of the Białowieża Forest District was adopted without ensuring that it would not adversely affect the integrity of the forest. Secondly, by undertaking the forest management activities as part of implementation of the provisions of this appendix (as well as the decision of the Director General of the State Forests issued on its basis), a risk was generated to the protected types of natural habitats and the protected species of insects (saproxylic beetles) and birds.

[33] Cf. para. 33 of the Opinion.

[34] Decision No. 51 of the Director General of the State Forests of 17 February of 2017 concerning the removal of trees infested by spruce bark beetles and the logging of trees constituting a threat to public safety and posing a fire risk in all age classes of forest stands in the Białowieża, Browsk, Hajnówka Forest Districts (State Forests Information Bulletin 2017, no. 6), hereinafter: the Decision No. 51.

Thus, the objections raised concern both the procedure of adopting an appendix to the Forest Management Plan of the Białowieża Forest District and the effects of its implementation.

On 5 July 2017, UNESCO called on Poland to immediately stop logging in the oldest, over 100-year-old parts of the Białowieża Primaeval Forest. UNESCO also decided to send a special scientific mission to the Forest, which was to assess whether the Forest should not be entered on the List of World Heritage in Danger due to logging.[35]

On 28 July 2017, the CJEU decided to apply an interim measure: Poland was to stop logging until its dispute with the European Commission was resolved. The only exception was situations that threaten public safety.

On 13 September 2017, the European Commission applied to the CJEU with a request to impose a financial penalty on Poland for failure to comply with an interim measure. According to the Commission, the Polish Ministry of the Environment continued the logging, abusing the clause on "threat to public safety" for this purpose. The CJEU did not share this objection and the penalty was not imposed.

However, on 20 November 2017, the CJEU once again ordered the immediate suspension of logging, this time clarifying the meaning of "public safety", and threatened Poland with fines of EUR 100,000 for each subsequent day of logging. Faced with the threat of such a draconian punishment, Poland finally stopped logging.

COUNTERARGUMENTS OF THE POLISH GOVERNMENT

1. The issue of integrity of the forest and protected habitats

According to the Polish side, the Commission failed to take into account the fact that the integrity of the Białowieża Forest has been shaped for centuries by human activities, through sustainable harvesting of the forests. In particular, the state and percentage coverage of the habitats and species present when a Natura 2000 site was designated in the Forest are the result of the previous harvesting of the Forest, that is to say, the extraction of timber from forest stands planted in the past.[36]

In Poland's view, the Commission is mistaken in its view that inaction has a positive impact on biodiversity. Thus, the results of the survey carried out since April 2016 show that, for example, in the strict protection area of the Białowieża National Park only one colony of *Boros schneideri* is present, while in the Białowieża Forest

[35] R. Jurszo, *Jan Szyszko: „Autorytet Polski został naruszony w skali światowej". Owszem, przez Szyszkę*, 22.8.2018, https://oko.press/jan-szyszko-autorytet-polski-zostal-naruszony-w-skali-swiatowej-owszem-przez-szyszke (access: 31.4.2023).

[36] Cf. para. 102 of the Opinion.

District the presence of 70 such colonies has been observed. A similar situation exists for a whole series of other species, such as, in particular, the pygmy owl and the three-toed woodpecker.[37]

The Polish side stressed that the Białowieża Forest is an ecosystem which is so specific and unique that the results of the studies on interdependence between various organisms carried out in other ecosystems cannot be transposed to the situation in that forest.[38]

2. The issue of protected insects

As for the issue of protected insects, Poland's arguments were as follows:

a) dead and dying trees are not an essential habitat for some of the saproxylic beetles, and the spruce is a second-choice habitat for them (regarding *Cucujus cinnaberinus*);
b) their locations in the Białowieża Forest District are to be found in the reference areas (excluded from commercial exploitation) and the essential cause of their disappearance is the absence of burned wood (regarding the false darkling beetle *Phryganophilus ruficollis*);
c) it is the activity of the spruce bark beetle that may have a negative impact on the continuity of the environments occupied by the protected insects, namely dead, old and felled spruce trees in wet habitats (regarding *Pytho kolwensis*);
d) the primary cause of their disappearance in Europe is the absence of old pine trees that have died following fires (regarding the goldstreifiger *Buprestis splendens*).[39]

For all those reasons, in the opinion of the Polish side, the operations provided for in the 2016 appendix do not have a significant negative impact on the population of the beetles under protection. The maintenance of those species is related to the continuity of the occurrence of certain habitats resulting from fires. In the absence of such disturbances, only intervention involving active protection is capable of preserving the habitat of those species.[40]

3. The issue of protected birds

Addressing the issue of protected birds, the Polish side argued that the positive impact of the large-scale spread of the spruce bark beetle on the survival and reproduction of protected cavity-nesting birds can only be temporary because, in the long

[37] Cf. para. 110 of the Opinion.
[38] Cf. para. 112 of the Opinion.
[39] Cf. para. 119 of the Opinion.
[40] Cf. para. 120 of the Opinion.

term, this will lead to the loss of the oldest parts of the forest with a preponderance of conifers. The constant reduction in the spread of the spruce bark beetle may be a factor in maintaining a relatively stable situation with regard to these birds.[41]

Poland has rejected the argument that the Eurasian pygmy owl (*Glaucidium passerinum*) loses breeding areas due to the removal of spruces on 5% of the Forest. It was pointed out that pygmy owl, which nests in cavities hollowed out generally by the great spotted woodpecker (*Dendrocopos major*), rather than three-toed woodpecker (*Picoides tridactylus*) or white-backed woodpecker (*Dendrocopos leucotos*), does not show any preference as to the species of tree in which it reproduces. Furthermore, the pygmy owl is often present in degraded environments and its occurrence is more frequent in the developed part of the Białowieża Forest. Similarly, as regards the Tengmalm's owl (*Aegolius funereus*) occurring in the Białowieża Forest, it often occupies cavities hollowed out by the black woodpecker (*Dryocopus martius*), and the possible effect of the removal of spruce trees on 5% of the site at issue may be regarded as having no impact from the point of view of the numbers of this species. It was also added that according to Finnish data, forest management through the clearing of areas, provided that the felled portion does not exceed 50% of the forest area from a long-term perspective, not only has no negative impact on those species but, by increasing accessibility of food, leads to increased reproduction.[42]

In addition – according to the defendant – the populations of cavity-nesting birds increase in size and spread to new areas. So-called biocenotic trees, including hollow trees, are left to their biological death, therefore the potential nesting sites of the pygmy owl and Tengmalm's owl will remain accessible. The 2015 PZO provides for operations consisting in "the conservation, during management interventions, of all pines and firs with apparent cavities, except where there is a danger to the public".[43]

THE POSITION OF THE CJEU

The arguments of the Polish side did not convince the CJEU. On 7 April 2018, the CJEU ruled that logging in the Białowieża Forest was illegal.[44] The CJEU ruled that Poland violated the provisions of the Habitat and Birds Directives (including failure to conduct the above-mentioned habitat assessment), and by cutting down old trees, it violated the provisions of the Natura 2000 Protective Task Plan.[45]

[41] Cf. para. 123 of the Opinion.
[42] Cf. para. 126 of the Opinion.
[43] Cf. para. 127 of the Opinion.
[44] Judgment of the CJEU (Grand Chamber) of 17 April 2018, case C 441/17, *European Commission v. Republic of Poland*, ECLI:EU:C:2018:255, hereinafter: the CJEU's judgment.
[45] R. Jurszo, *op. cit*.

1. The issue of integrity of the forest and protected habitats

The CJEU stated that the 2016 appendix, which is concerned solely with increasing the volume of harvestable timber by the carrying out of the active forest management operations at issue within the Natura 2000 Puszcza Białowieska site, does not lay down in the slightest the conservation objectives and measures relating to that site, which are set out, in fact, in the 2015 PZO, adopted a short time earlier by the Polish authorities. Therefore, the 2016 appendix and Decision No. 51, in that they permit such an intervention in the natural environment intended to exploit the forest's resources, constitute a "plan or project not directly connected with or necessary to the management of" the Natura 2000 Puszcza Białowieska site, within the meaning of the Habitats Directive.[46]

Moreover, Poland wrongly argued that the 2016 appendix made it possible to achieve the conservation objective of limiting the spread of the spruce bark beetle. That objective does not appear at all among the conservation objectives set out in the 2015 PZO, which, on the contrary, expressly provides in Annex 3 that the removal of spruces colonised by the spruce bark beetle must be regarded as a potential threat to the maintenance of a favourable conservation status of the habitats of the pygmy owl, the Tengmalm's owl and three-toed woodpecker. It follows that Poland was required to carry out an appropriate assessment of the impact of the active forest management operations at issue if there was a likelihood of those operations having a significant effect on the integrity of the Natura 2000 Puszcza Białowieska site.[47]

According to the CJEU, the 2015 impact assessment has a number of substantial lacunae, namely:

a) the assessment relates solely to the 2016 appendix and not to Decision No. 51 though the Decision extended the implementation of the active forest management operations provided for in that annex in solely the Białowieża Forest District to the Browsk and Hajnówka Forest Districts and, therefore, to the entire Natura 2000 Puszcza Białowieska site with the exception of just the national park;
b) it is not based on updated data concerning the protected habitats and species;
c) it does not refer to the conservation objectives of the protected habitats and species on the Natura 2000 Puszcza Białowieska site that were covered by the 2015 PZO, nor does it define the integrity of that site or examine carefully the reasons why the active forest management operations at issue are not liable to affect that site adversely.[48]

[46] Paras 123 and 124 of the CJEU's judgment.
[47] Paras 126–127 of the CJEU's judgment.
[48] Paras 133, 134, 137, 140 of the CJEU's judgment.

The CJEU has concluded that, as the Polish authorities did not have all the data relevant for assessing the implications of the active forest management operations at issue for the integrity of the Natura 2000 Puszcza Białowieska site, they did not carry out an appropriate assessment of those implications before the 2016 appendix and Decision No. 51 were adopted and, therefore, failed to fulfil their obligation arising from the first sentence of Article 6 (3) of the Habitats Directive.[49]

Referring to the issue of infringement of the integrity of the Białowieża Forest by the discussed forestry operations, the CJEU stated that neither the appendix nor Decision No. 51 contains restrictions relating to the age of the trees or to the forest stands covered by those operations, which follows that these documents authorise the felling of spruces that are a century old or more in any type of stand, including in protected habitats. Moreover, these acts authorise the removal of all types of "trees", thus including not only spruce trees but also pines, hornbeams, oaks, alders, ash, willows and poplars, when they are "dead", "dry" or "dying", and equally does not lay down any restriction as to the stands concerned.[50]

The CJEU stressed that the active forest management operations at issue correspond precisely to the potential threats identified by Polish authorities in Appendix 3 to 2015 PZO for protected habitats and species that occur in the Forest. "The felling of tree in stands more than a century old" is identified in the 2015 PZO as a potential threat to habitats of broadleaved forest and willow, poplar, alder and ash riparian forests as well as to the honey buzzard living in those habitats; in addition, "pruning/felling in forests" and the "regeneration of forests and mixed forests by forest management operations" are mentioned as threats to *Boros schneideri*; "the removal of infested pines and spruces more than a century old" is identified as a potential threat to the pygmy owl, Tengmalm's owl and three-toed woodpecker; "the removal of dead or dying trees" is listed as a potential threat to the above-mentioned habitats and to the pygmy owl, Tengmalm's owl, white-backed woodpecker, three-toed woodpecker and *Cucujus cinnaberinus*, whilst "the removal of dying trees" is identified as a potential threat to *Boros schneideri*, goldstreifiger (*Buprestis splendens*), false darkling beetle (*Phryganophilus ruficollis*), *Pytho kolwensis* and wrinkled bark beetle (*Rhysodes sulcatus*).[51]

In the CJEU's opinion, these activities cannot be justified by the need to reduce the spread of spruce bark beetle, especially since as at the date of adoption of the 2016 appendix, there was still scientific controversy regarding the most appropriate methods to stop the spread of this pest and there was no scientific certainty that

[49] Para. 151 of the CJEU's judgment.
[50] Paras 160 and 162 of the CJEU's judgment.
[51] Paras 166–168 of the CJEU's judgment.

the active forest management operations at issue would not have lasting adverse effects on the integrity of the site concerned.[52]

2. The issue of protected insects

Addressing the issue of protected insects, the CJEU stated that it was clear from the 2015 PZO that dead or dying spruces, colonised as the case may be by the spruce bark beetle, constitute, at the very least, an important habitat for saproxylic beetles such as *Buprestis splendens*, *Cucujus cinnaberinus*, false darkling beetle and *Pytho kolwensis*. The arguments put forward by Poland to demonstrate that the spruce is not the habitat or is not, at least, an important habitat of those species cannot therefore succeed, as those arguments blatantly contradict the Polish authorities' own findings in the 2015 PZO which was drawn up by them in respect of the Natura 2000 Puszcza Białowieska site. As for the assertion that the false darkling beetle is present only in the reference areas, the CJEU considered that assertion entirely unsupported.[53]

3. The issue of protected birds

A similar argument was considered by the CJEU as decisive for resolving the question of the complaint about generating a threat posed to birds. It was found as quite clear from the 2015 PZO that spruces a century old or more colonised by the spruce bark beetle and dead or dying trees constitute, at the very least, an important habitat for the pygmy owl, Tengmalm's owl, white-backed woodpecker and three-toed woodpecker, and the removal of trees of that type was specifically identified by this plan as a potential threat to those bird species.[54]

Moreover, according to the CJEU, the obligations to protect exist even before any reduction in the number of birds has been observed or before the risk of a protected species becoming extinct has materialised, therefore the Polish argument that the populations of the birds concerned remain stable cannot justify activities that are contrary to those defined in the Birds Directive as protective.[55]

[52] Para. 179 of the CJEU's judgment.
[53] Paras 233–235 of the CJEU's judgment.
[54] Para. 254 of the CJEU's judgment.
[55] Para. 262 of the CJEU's judgment.

THE RULING OF THE CJEU AND ITS CONSEQUENCES

Accepting the applicant's arguments in whole and rejecting the arguments of the defendant in their entirety, and based on the opinion of Advocate General Yves Bot, who proposed declaring that Poland had infringed all the provisions of EU law listed in the action,[56] the CJEU upheld in its entirety the action brought by the Commission against Poland regarding the forestry management operations undertaken in the Białowieża Forest to combat European spruce bark beetle.

On 15 May 2018, the new Polish Minister of Environment, Henryk Kowalczyk, ordered the State Forests to repeal Decision No. 51, which allowed logging. It was the formal end of cuts in the Białowieża Forest due to the outbreak of the bark beetle.[57]

According to the Polish government, Poland would comply with the CJEU's final judgment on the Białowieża Forest,[58] but some NGOs argued that, e.g., the appendix to the Forest Management Plan for the Białowieża Forest District, a document forming basis for logging in the forest, was still in force.[59]

Former Minister of Environment Jan Szyszko criticized the CJEU's ruling, claiming that it is the result of "a developing philosophical and political trend in which man is shown as the greatest enemy of natural resources, and the highest form of protection is not killing animals and not cutting trees". He added that "over 6 million m^3 of wood are now rotting in the Białowieża Forest", that is, the amount that allows to build a wall connecting Warsaw and Lisbon, 1 m thick, 2 m high.[60] Even before the judgment of the CJEU, Szyszko stated that the large-scale research carried out in the Forest (covering 1,400 research areas) showed that "the more dead wood in the Forest, the smaller the occurrence of protected insects and birds", because falling and flooded trees cease to be a habitat for both birds and insects, and in the part constituting the National Park there are half of the species that occur in the rest of the Forest.[61] The former minister also drew attention to the fact that for many hundreds of years the Białowieża Forest was protected by man until the devastating world wars. He recalled that "in the years 1915–1918, the Germans occupying the Białowieża Forest cut an

---

[56] Para. 180 of the CJEU's judgment.

[57] R. Jurszo, *op. cit*.

[58] Ministerstwo Klimatu i Środowiska, *MŚ o opinii rzecznika generalnego Trybunału Sprawiedliwości UE ws. Puszczy Białowieskiej*, 20.2.2018, https://www.gov.pl/web/klimat/ms-o-opinii-rzecznika-generalnego-trybunalu-sprawiedliwosci-ue-ws-puszczy-bialowieskiej (access: 31.4.2023).

[59] Greenpeace, *Rok od wyroku Trybunału Sprawiedliwości ws. Puszczy Białowieskiej. Co się (nie) wydarzyło*, 16.4.2019, https://www.greenpeace.org/poland/aktualnosci/1251/rok-od-wyroku-trybunalu-sprawiedliwosci-ws-puszczy-bialowieskiej-co-sie-nie-wydarzylo (access: 31.4.2023).

[60] S. Wójcik, *Ostatni wywiad z prof. Janem Szyszko*, 9.10.2019, https://www.youtube.com/watch?v=FpI0GOKKHV4 (access: 31.4.2023).

[61] Telewizja Republika, *Prof. Jan Szyszko – o celowej dezinformacji Komisji Europejskiej ws. Puszczy*, 21.11.2017, https://www.youtube.com/watch?v=BcoRQyRp3m4 (access: 31.4.2023).

area of 18,000 hectares", thus obtaining up to 5 million m^3 of wood, and "in the years 1941–1944, under the German occupation, the *Reichsjagdgebiete* hunting ground was created in the Forest". Moreover, he emphasized that all the existing reserves were created during the Polish rule – in the interwar period and after the war.[62] "It was completely ignored in the media hype in the world, where Poland was shown as a vandal who wants to cut down Europe's last primaeval forest. I omit the whole matter of logical thinking that if the last primaeval forest of Europe is cut down, it means that those who criticize it had cut down the penultimate one" – he said.[63] In another statement, Jan Szyszko accused the European Commission of misleading the public by claiming that the Białowieża Forest was "a primaeval forest untouched by human hands", while – apart from the National Park, where no clearings were carried out – it is an economic forest, as evidenced by, for example, a network of intersecting it at right angles ducts.[64]

The UNESCO experts, in the report of 3 April 2019, compared the actions taken in the Białowieża Forest on both sides of the state border. They indicated that in the Belarusian part of the Forest dominates a non-invasive economy, aimed at active management for the implementation of specific tasks related to nature protection and fully compatible with the unique universal values for which the Białowieża Forest has been recognized as a World Heritage area. They contrasted it with the actions taken between 2016 and 2018 in the Polish part of the Forest, which, in their opinion, were contrary to the Polish side's obligations regarding the management of the World Heritage site and disrupted the natural ecological processes.[65] However, the experts did not explain whether, and, if so, how these activities harmed the rare and specially protected species of birds and insects inhabiting the Forest.

CONCLUSIONS

The dispute between the European Commission and the Polish Government regarding the Białowieża Forest was ongoing on two levels: natural and legal. The dispute on the natural level had a teleological dimension. It was about the answer to

[62] M. Sieradzka, *Minister Szyszko: Niemcy też wycinali Puszczę Białowieską*, 31.5.2017, https://www.dw.com/pl/minister-szyszko-niemcy-też-wycinali-puszczę-białowieską/a-39060265 (access: 31.4.2023).

[63] Radio Maryja, *Zakończyło się 52. seminarium naukowe na temat globalnych zagrożeń*, 28.8.2019, https://www.radiomaryja.pl/multimedia/zakonczylo-sie-52-seminarium-naukowe-na-temat-globalnych-zagrozen (access: 31.4.2023).

[64] S. Wójcik, *op. cit*.

[65] Dziennik Gazeta Prawna, *UNESCO: Wycinka w Puszczy Białowieskiej jest dla niej zagrożeniem*, 9.4.2019, https://serwisy.gazetaprawna.pl/ekologia/artykuly/1407314,raport-unesco-wycinka-zagraza-puszczy-bialowieskiej.html (access: 31.4.2023).

the question of what actions are most appropriate in the fight against the bark beetle, taking into account the good of the Forest, and therefore what actions should be taken. The dispute on the legal level was a dispute about the applicable regulations and their interpretation. It was about the answer to the question of what actions are allowed, ordered or prohibited in the fight against the spruce bark beetle in the Białowieża Forest in the light of applicable Polish and EU law. The analysis of science's views on the problem of combating the spruce bark beetle proves that no unified or even dominant position has been developed in it. Even the fundamental issue, i.e. the relationship between the presence of infested trees and the presence or abundance of representatives of rare animal species, especially avifauna, is controversial. In the light of the above analysis, the image of the Polish Minister of the Environment, who represented the Government of the Republic of Poland in the dispute with the European Commission, as a person acting to the detriment of the Białowieża Forest and its valuable fauna, presented in the media, appears to be extremely harmful. A separate issue is, as mentioned, compliance with the law, and especially with EU directives, conducted in the Forest as part of the fight against the bark beetle forest management. The CJEU found these actions to be in breach of the law. While the legal justification does not raise any doubts, the factual justification of the CJEU's judgment is strikingly one-sided, as it completely rejects the rational arguments of the Polish side, based on many years of experience and scientific research.

REFERENCES

Literature

Angermeier P.L., *The Natural Imperative for Biological Conservation*, "Conservation Biology" 2000, vol. 14.

Baier P., *Defence Reactions of Norway Spruce (Picea Abies Karst.) to Controlled Attacks of Ips typographus (L.) (Col., Scolytidae) in Relation to Tree Parameters*, "Journal of Applied Entomology" 1996, vol. 120(1–5), **DOI: https://doi.org/10.1111/j.1439-0418.1996.tb01656.x**.

Bobiec A., *What Is the Use of the Research Carried Out on the Permanent Plots in the Białowieża National Park?*, "Forest Research Papers" 2016, vol. 77.

Bobiec A., Bobiec M., *Wpływ masowego zamierania świerka w drzewostanach Białowieskiego Parku Narodowego na odnowienie naturalne dębu*, "Sylwan" 2012, no. 156.

Bobiec A., Jaszcz E., Wojtunik K., *Oak (Quercus Robur L.) Regeneration as a Response to Natural Dynamics of Stands in European Hemiboreal Zone*, "European Journal of Forest Research" 2011, vol. 130(5), **DOI: https://doi.org/10.1007/s10342-010-0471-3**.

Bobiec A. et al., *Dlaczego martwe świerki są potrzebne w Puszczy Białowieskiej?*, "Las Polski" 2016, no. 7.

Brzeziecki B., Pommerening A., Miścicki S., Drozdowski S., Żybura H., *A Common Lack of Demographic Equilibrium among Tree Species in Bialowieża National Park (NE Poland): Evidence from Long-Term Plots*, "Journal of Vegetation Science" 2016, vol. 27(3), **DOI: https://doi.org/10.1111/jvs.12369**.

Brzeziecki B. et al., *Problem masowego zamierania drzewostanów świerkowych w Leśnym Kompleksie Promocyjnym „Puszcza Białowieska"*, "Sylwan" 2018, no. 162.

Cho K.S. et al., *Terpenes from Forests and Human Health*, "Toxicological Research" 2017, vol. 33, **DOI: https://doi.org/10.5487/TR.2017.33.2.097**.

Chylarecki P., Selva N., *Ancient Forest: Spare It from Clearance*, "Nature" 2016, vol. 530, **DOI: https://doi.org/10.1038/530419b**.

Clark J., Cole D.H., *Environmental Protection in Transition: Economic, Legal and Socio-Political Perspectives on Poland*, London 2017.

Grodzki W., *Mass Outbreaks of the Spruce Bark Beetle Ips typographus in the Context of the Controversies around the Białowieża Primeval Forest*, "Forest Research Papers" 2016, vol. 77.

Grzywaczewski G., Kitowski I., *Poland's Conflicting Environmental Laws*, "Science" 2019, vol. 365(6449), **DOI: https://doi.org/10.1126/science.aax5830**.

Grzywaczewski G., Kitowski I., *The Ecosystems of Large Unregulated Rivers of Central Europe Are under Pressure*, "Oryx" 2019, vol. 53(4), **DOI: https://doi.org/10.1017/S0030605319000644**.

Gutowski J.M., Krzysztofiak L., *Directions and Intensity of Migration of the Spruce Bark Beetle and Accompanying Species at the Border between Strict Reserves and Managed Forests in North-Eastern Poland*, "Ecological Questions" 2005, vol. 6.

Hilszczański J., Jaworski T., *Ochrona bioróżnorodności Puszczy Białowieskiej w kontekście dynamiki naturalnych i sztucznych zaburzeń*, "Sylwan" 2018, no. 162, **DOI: https://doi.org/10.26202/sylwan.2018137**.

Jasiński P., *Pro-Ecological Privatisation? Ownership Changes and Natural Environment in Poland, 1989–1994*, "Communist Economies and Economic Transformation" 1996, vol. 8(3), **DOI: http://doi.org/10.1080/14631379608427861**.

Jędrzejewska B., Jędrzejewski, W., *Predation in Vertebrate Communities: The Bialowieża Primeval Forest as a Case Study*, "Ecological Studies" 1998, vol. 135.

Kasumović L., Lindelöw Å., Hrašovec B., *Overwintering Strategy of Ips typographus L. (Coleoptera, Curculionidae, Scolytinae) in Croatian Spruce Forests on Lowest Elevation*, "Šumarski List" 2019, vol. 143(1–2), **DOI: https://doi.org/10.31298/sl.143.1-2.2**.

Kuboń M. et al., *Searching for Solutions to the Conflict Over Europe's Oldest Forest*, "Conservation Biology" 2019, vol. 33(2), **DOI: https://doi.org/10.1111/cobi.13229**.

Lawrence A., *Forestry in Transition: Imperial Legacy and Negotiated Expertise in Romania and Poland*, "Forest Policy and Economics" 2009, vol. 11(5–6), **DOI: https://doi.org/10.1016/j.forpol.2009.02.003**.

Lazdinis M., Pivoriūnas A., Lazdinis I., *Cooperation in Private Forestry of Post-Soviet System: Forest Owners' Cooperatives in Lithuania*, "Small-Scale Forest Economics, Management and Policy" 2005, vol. 4(4), **DOI: https://doi.org/10.1007/s11842-005-0023-8**.

Mastalska-Cetera B., Krajewski P., *Obszary Natura 2000 jako uwarunkowanie planowania rozwoju regionalnego*, "Studia KPZK" 2015, no. 161.

Michalak P., *Ancient Forest: Keep the Logging Ban*, "Nature" 2016, vol. 530, **DOI: https://doi.org/10.1038/530419c**.

Michalski J., Starzyk J.R., Kolk A., Grodzki W., *Zagrożenie świerka przez kornika drukarza Ips typographus L. w drzewostanach leśnego kompleksu promocyjnego „Puszcza Białowieska" w latach 2000–2002*, "Leśne Prace Badawcze" 2004, no. 3.

Namura-Ochalska A., *Natura 2000 w lasach – ochrona różnorodności biologicznej*, "Studia i Materiały Centrum Edukacji Przyrodniczo-Leśnej" 2010, vol. 12(2).

Niedziałkowski K. et al., *Effective Mitigation of Conservation Conflicts and Participatory Governance: Reflections on Kuboń et al.*, "Conservation Biology" 2019, vol. 33(4), **DOI: https://doi.org/10.1111/cobi.13332**.

Nowak D.J., Hirabayashi S., Bodine A., Greenfield E., *Tree and Forest Effects on Air Quality and Human Health in the United States*, "Environmental Pollution" 2014, vol. 193, **DOI: https://doi.org/10.1016/j.envpol.2014.05.028**.

Olecka A. et al., *Poland's National Inventory Report*, Warszawa 2018.

Park B.J., Tsunetsugu Y., Kasetani T., Kagawa T., Miyazaki Y., *The Physiological Effects of Shinrin-Yoku (Taking in the Forest Atmosphere or Forest Bathing): Evidence from Field Experiments in 24 Forests across Japan*, "Environmental Health and Preventive Medicine" 2010, vol. 15, **DOI: https://doi.org/10.1007/s12199-009-0086-9**.

Pawlaczyk P., *Martwe drzewa w ochronie żywej przyrody*, [in:] *Stan ekosystemów leśnych Puszczy Białowieskiej. Ogólnopolska Konferencja Naukowa Ministerstwa Środowiska i Dyrekcji Generalnej Lasów Państwowych*, eds. M. Ksepko et al., Warszawa 2016.

Pawłowski L., Dudzińska M.R., *Environmental Problems of Poland during Economic and Political Transformation*, "Ecological Engineering" 1994, vol. 3(3), **DOI: https://doi.org/10.1016/0925-8574(94)90050-7**.

Seidl R. et al., *Small Beetle, Large-Scale Drivers: How Regional and Landscape Factors Affect Outbreaks of the European Spruce Bark Beetle*, "Journal of Applied Ecology" 2016, vol. 53, **DOI: https://doi.org/10.1111/1365-2664.12540**.

Sierota Z., Grodzki W., Szczepkowski A., *Abiotic and Biotic Disturbances Affecting Forest Health in Poland Over the Past 30 Years: Impacts of Climate and Forest Management*, "Forests" 2019, vol. 10, **DOI: https://doi.org/10.3390/f10010075**.

Song C., Ikei H., Miyazaki Y., *Physiological Effects of Nature Therapy: A Review of the Research in Japan*, "International Journal of Environmental Research and Public Health" 2016, vol. 13(8), **DOI: https://doi.org/10.3390/ijerph13080781**.

Szulecka J., Szulecki K., *Between Domestic Politics and Ecological Crises: (De)legitimization of Polish Environmentalism*, "Environmental Politics" 2022, vol. 31(7), **DOI: https://doi.org/10.1080/09644016.2019.1674541**.

Teder M. et al., *Structural Changes of State Forest Management Organisations in Estonia, Latvia, Lithuania, Serbia and Slovakia Since 1990*, "Baltic Forestry" 2015, vol. 21(2).

Tsunetsugu Y. et al., *Physiological Effects of Shinrin-Yoku (Taking in the Atmosphere of the Forest) in an Old-Growth Broadleaf Forest in Yamagata Prefecture, Japan*, "Journal of Physiological Anthropology" 2007, vol. 26(2), **DOI: https://doi.org/10.2114/jpa2.26.135**.

Wermelinger B., *Ecology and Management of the Spruce Bark Beetle Ips typographus – a Review of Recent Research*, "Forest Ecology and Management" 2004, vol. 202(1–3), **DOI: https://doi.org/10.1016/j.foreco.2004.07.018**.

Wesołowski T., *Primeval Conditions – What Can We Learn from Them?*, "Ibis" 2007, vol. 149(2), **DOI: https://doi.org/10.1111/j.1474-919X.2007.00721.x**.

Wesołowski T., *The Breeding Ecology and Behaviour of Wrens Troglodytes troglodytes under Primaeval and Secondary Conditions*, "Ibis" 1983, vol. 125(4), **DOI: https://doi.org/10.1111/j.1474-919X.1983.tb03144.x**.

Wesołowski T. et al., *Spór o przyszłość Puszczy Białowieskiej: mity i fakty. Głos w dyskusji*, "Chrońmy Przyrodę Ojczystą" 2016, no. 2.

Zastocki D., Lachowicz H., Sadowski J., Moskalik T., Nietupska M., *Pozyskanie drewna w nadleśnictwach Puszczy Białowieskiej w latach 2008–2015*, "Sylwan" 2018, no. 162.

Zeppenfeld T. et al., *Response of Mountain Picea Abies Forests to Stand-Replacing Bark Beetle Outbreaks: Neighbourhood Effects Lead to Self-Replacement*, "Journal of Applied Ecology" 2015, vol. 52(5), **DOI: https://doi.org/10.1111/1365-2664.12504**.

Zielińska A., *Rozwój społeczno-gospodarczy na obszarach chronionych*, "Zeszyty Naukowe Uniwersytetu Szczecińskiego. Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania" 2014, no. 3.

Online sources

Dziennik Gazeta Prawna, *UNESCO: Wycinka w Puszczy Białowieskiej jest dla niej zagrożeniem*, 9.4.2019, https://serwisy.gazetaprawna.pl/ekologia/artykuly/1407314,raport-unesco-wycinka-zagraza-puszczy-bialowieskiej.html (access: 31.4.2023).

Greenpeace, *Rok od wyroku Trybunału Sprawiedliwości ws. Puszczy Białowieskiej. Co się (nie) wydarzyło*, 16.4.2019, https://www.greenpeace.org/poland/aktualnosci/1251/rok-od-wyroku-trybunalu-sprawiedliwosci-ws-puszczy-bialowieskiej-co-sie-nie-wydarzylo (access: 31.4.2023).

Jurszo R., *Jan Szyszko: „Autorytet Polski został naruszony w skali światowej". Owszem, przez Szyszkę*, 22.8.2018, https://oko.press/jan-szyszko-autorytet-polski-zostal-naruszony-w-skali-swiatowej-owszem-przez-szyszke (access: 31.4.2023).

Ministerstwo Klimatu i Środowiska, *MŚ o opinii rzecznika generalnego Trybunału Sprawiedliwości UE ws. Puszczy Białowieskiej*, 20.2.2018, https://www.gov.pl/web/klimat/ms-o-opinii-rzecznika-generalnego-trybunalu-sprawiedliwosci-ue-ws-puszczy-bialowieskiej (access: 31.4.2023).

Opinion of Advocate General Yves Bot delivered on 20 February 2018 in case C-441/17, *European Commission v. Republic of Poland*, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CC0441&from=EN (access: 31.4.2023).

Radio Maryja, *Zakończyło się 52. seminarium naukowe na temat globalnych zagrożeń*, 28.8.2019, https://www.radiomaryja.pl/multimedia/zakonczylo-sie-52-seminarium-naukowe-na-temat-globalnych-zagrozen (access: 31.4.2023).

Sieradzka M., *Minister Szyszko: Niemcy też wycinali Puszczę Białowieską*, 31.5.2017, https://www.dw.com/pl/minister-szyszko-niemcy-też-wycinali-puszczę-białowieską/a-39060265 (access: 31.4.2023).

Telewizja Republika, *Prof. Jan Szyszko – o celowej dezinformacji Komisji Europejskiej ws. Puszczy*, 21.11.2017, https://www.youtube.com/watch?v=BcoRQyRp3m4 (access: 31.4.2023).

Wójcik S., *Ostatni wywiad z prof. Janem Szyszko*, 9.10.2019, https://www.youtube.com/watch?v=FpI-0GOKKHV4 (access: 31.4.2023).

Legal acts

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206/7, 22.7.1992).

Council Directive 2013/17/EU of 13 May 2013 adapting certain directives in the field of environment, by reason of the accession of the Republic of Croatia (OJ L 158/193, 10.6.2013).

Decision No. 51 of the Director General of the State Forests of 17 February of 2017 concerning the removal of trees infested by spruce bark beetles and the logging of trees constituting a threat to public safety and posing a fire risk in all age classes of forest stands in the Białowieża, Browsk, Hajnówka Forest Districts (State Forests Information Bulletin 2017, no. 6).

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20/7, 26.1.2010).

Case law

Judgment of the CJEU (Grand Chamber) of 17 April 2018, case C 441/17, *European Commission v. Republic of Poland*, ECLI:EU:C:2018:255.

ABSTRAKT

W artykule opisano podłoże, genezę, przebieg i wynik sporu między Polską a Komisją Europejską, który toczył się w latach 2016–2018 o gospodarkę leśną prowadzoną w Puszczy Białowieskiej. Spór toczył się na dwóch powiązanych ze sobą płaszczyznach: przyrodniczej i prawnej. Główną osią sporu była różnica poglądów na to, jakie działania mogą przynieść skutek w walce z gradacją kornika drukarza, która w 2015 r. nastąpiła z wyjątkową intensywnością w Puszczy Białowieskiej, a także jakie działania byłyby najkorzystniejsze w kontekście zachowania rzadkich gatunków ptaków i owadów współtworzących faunę Puszczy. W artykule obszernie zaprezentowano argumenty podnoszone przez obie strony w postępowaniu przed Trybunałem Sprawiedliwości Unii Europejskiej, które uruchomione zostało skargą wniesioną przez Komisję Europejską. Jako komentarz do tych argumentów przedstawiono poglądy wyrażane w nauce odnośnie do pożądanych sposobów reagowania na okresowe gradacje kornika drukarza, celowości i skuteczności kwestionowanych przez Komisję Europejską działań gospodarczych oraz wpływu owych działań na stan podlegających ochronie siedlisk przyrodniczych, owadów i ptaków. Prawny wymiar sporu sprowadzał się do kwestii, jakie działania w zaistniałej sytuacji są dozwolone, nakazane bądź zakazane w świetle prawa polskiego i unijnego.

Słowa kluczowe: gospodarka leśna; Puszcza Białowieska; kornik drukarz; ochrona siedlisk przyrodniczych; Komisja Europejska