

International Woodpecker Conference resolution¹

Old-growth forests have outstanding conservation value, however, they comprise less than 1% of Europe's forest area². Białowieża Forest, shared between Poland and Belarus, represents the largest remnant of lowland old-growth forest with a low human footprint and the best preserved lowland forest remaining in Europe. It is an invaluable center of species, structural, and genetic diversity, where numerous specialized forest organisms have survived. The Białowieża Forest supports 111 breeding species of birds including eight species of excavating woodpeckers and 24 species of non-excavating birds³, and other vertebrates. This forest thus preserves the most complete assemblage of hole nesting faunal community in Europe. This high avian diversity is a result of nearly twelve thousand years of continuous forest development and the persistence of natural processes, including disturbance by wind, fire, and insect outbreaks²⁻⁴, which continue to operate with limited human impact.

Białowieża Forest is an irreplaceable living laboratory for ecological and evolutionary sciences, and has the potential to become a prime model for nature conservation and forest research, and an important benchmark for conservation science and modern forestry. The challenges brought by climate change require the preservation of large set-aside reference areas where processes associated with forest ecosystem resilience and adaptation to new environmental conditions can be maintained. Society and science urgently need reference areas like Białowieża Forest to study nature's inherent ability to adapt to climate change and to devise functional climate adaptation policies in managed forests^{5,6}.

Białowieża Forest is a UNESCO World Heritage Site, with its Polish part being a Natura 2000 site. Of concern, forestry operations are still ongoing on two thirds of the Polish part of Białowieża Forest including logging, tree planting, fencing, and road development. They are a major threat to Białowieża Forest and undermine opportunities for sustainable development of the local communities⁷⁻¹³. Some recent logging activities were ruled illegal by the Court of Justice of the European Union on 17th April 2018¹⁴. However, continued logging is planned¹⁵. The future of this unique forest, representing irreplaceable millennia of natural processes, remains uncertain and at risk.

We, the participants of the 8th International Woodpecker Conference", held in Białowieża from 16 to 20 March 2019, express high concern about the future of the Polish side of Białowieża Forest and urge the Polish, European, and international authorities to fulfill their obligation to safe-guard this precious and unique natural world heritage for current and future generations and to:

- (1) stop all ongoing forestry operations immediately,
- (2) prevent all future forestry operations,
- (3) protect the entire Polish part of the Białowieża Forest ecosystem as a National Park,
- (4) implement a science-based conservation strategy to protect ecological processes and biological diversity in line with the national and international legislation, and
- (5) develop a program that promotes the sustainable development of the local communities within the context of non-extractive use of the Białowieża Forest.

Footnotes

¹The "8th International woodpecker Conference" was held in Białowieża (Poland) 16-20 March, 2019. The scientific conference was attended by 110 participants from 21 countries. The program included 4 plenary talks, 26 oral presentations, 25 posters, 1 workshop and 1 roundtable discussion. As previous international woodpecker conferences held since 1989, the conference in Białowieża brought together woodpecker researchers from across the globe and provided an international forum for discussion on how woodpecker research may improve our understanding of behavior, ecology and conservation sciences. The title of conference "Conservation & Ecology of Woodpeckers" was chosen to underline that woodpeckers, as a group, are specialized birds that need protection of their habitats – even more so today with the ongoing, and in parts of the worlds intensifying, use and destruction of forests. The conference followed the path of previous scientific meetings on woodpeckers organized by the Special Interest Group Woodpeckers https://www.fachgruppe-spechte.de/ of the German Ornithologists' Society (Deutsche Ornithologen-Gesellschaft - DO-G https://www.do-g.de/), which launched the initiative also for this meeting. The conference was mainly organized by Siedlce University of Natural Sciences and Humanities, the Museum and Institute of Zoology (Polish Academy of Science) and the Special Interest Group Woodpeckers of the German Ornithologists' Society. The Białowieża National Park and the German Ornithologists' Society DO-G supported the conference.

² Sabatini F.M., Burrascano S., Keeton W.S., et al. 2018. Where are Europe's last primary forests? Diversity and Distributions 24: 1426-1439.

³ Tomiałojć L., Wesołowski T. 2004. Diversity of the Białowieża Forest avifauna in space and time. Journal of Ornithology 145:81-92.

⁴ Wesołowski T., Martin K. 2018. Three holes and hole-nesting birds in European and North American forests. W: Mikusiński G., Roberge J-M., Fuller R. Ecology and conservation of forest bird. Cambridge Univ. Press, Cambridge, pp. 79-134.

⁵ Kujawa A., Orczewska A., Falkowski M., Blicharska M., Bohdan A., Buchholz L., Chylarecki P., Gutowski J.M., Latałowa M., Mysłajek R.W., Nowak S., Walankiewicz W., Zalewska A. 2016. The Białowieża Forest – a UNESCO Natural Heritage Site – protection priorities. Leśne Prace Badawcze 77(4): 302-323. DOI-10.1515-frp-2016-0032

⁶ Marris E. 2008. The heart of the wood. Nature 455: 277-280.

⁷ Giergiczny M. 2009. Recreational value of the Białowieża National Park. Ekonomia il Środowisko 2: 116-128. [In Polish]

⁸ Albrecht J., Berens D.G., Jaroszewicz B., Selva N., Brandl R., Farwig N. 2014. Correlated loss of ecosystem services in coupled mutualistic networks. Nature Communications 5: 3810.

⁹ Gross M. 2016. Europe's last wilderness threatened. Current Biology 26: R641-R666.

 $^{^{10}}$ Schiermeier Q. 2016. Pristine Forest at risk. Nature 530: 393.

¹¹ Wesołowski T., Gutowski J.M., Jaroszewicz B., Kowalczyk R., Niedziałkowski K., Rok J., Wójcik J.M. 2018. The national park of the Białowieża Forest – nature conservation and development of local communities. www.forestbiology.org. Article 2: 1-28 http://www.forestbiology.org/articles/FB_05.pdf?i=5c9a4e8752ee8. [In Polish]

¹² Mikusiński G., Bubnicki J.W., Churski M., Czeszczewik D., Walankiewicz W., Kuijper D.P.J. 2018. Is the impact of loggings in the last primeval lowland forest in Europe underestimated? The conservation issuees of Białowieża Forest. Biological Conservation 227: 266-274.

¹³ Żmihorski M., Chylareski P., Orczewska A., Wesołowski T. 2018. Białowieża Forest: A new threat. Science 361: 238.

¹⁴ Schiermeier Q. 2018. EU's top court says logging in Poland's ancient forest was illegal. Nature. 10.1038/d41586-018-04730-z.

¹⁵ Ruszyły prace przy aneksach do planów urządzania lasu nadleśnictw Puszczy Białowieskiej https://www.gazetaprawna.pl/artykuly/1389027,aneksy-do-planow-urzadzania-lasu-nadlesnictw-puszczy-bialowieskiej.html. Dec. 23, 2018. [In Polish]