
Primaeval Forest or no Primaeval Forest?

Natural plead for the preservation of the unique forest ecosystem of Bialowieza
0,0065 percent of Polands forests – 0,00006 percent of Europes forests



Frank Verhart
“forestry engineer”

Kanne (Riemst), Belgium
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“If men spit upon the ground, they spit upon themselves.”
Chief Seattle, Northern America, 1854

“After all, what is left of nature in this country?”
JC Bloem, a Dutch poet, 1945

“What have you, scientists, done to our Forest? Before the war, when someone was shooting at you, you just ran ten steps and you were hidden behind trees. Today two hundred steps is not enough...”
A retired woodcutter from Bialowieza, Poland, 1999

“The last days of the second millenium AD brought the final decision of the government: the whole of the Bialowieza Forest would not be a national park.”
Simona Kossak, Poland, 2001

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¹ Surface of Bialowieza Forest: 59.500 ha (Source: Mammal Research Institute, Academy of Sciences, Bialowieza). Surface of Polish and Europes forests respectively: 9.047.000 ha, 1.039.250.000 ha (Source: FAO of United Nations)

Introduction

This document should be a fairy tale as it tells about a forest which has remained to possess over its primaeval character even into the twentieth century. A forest in which the development of the earth, the water economy and the natural competition of all living there could continue for a real long period without the intervention of man. These natural processes have been disturbed too in Bialowieza, but they are from the European point of view still remarkably spontaneous.

The past century turned out to be the first in which the species “man” proved to set himself free from the natural restrictions which had been strict limiting conditions in previous centuries in daily life. Although disasters such as inundations, wars and epidemics occurred during the 20th century can be averted according to the view of legions in Western, “prosperous” societies, it can be concluded that this kind of phenomena occurred. During and after the century in which man set himself virtually free from natural restrictions, the same species (man) is solving, like ever before in fact, problems and “problems” of all kinds. The means that lead to solve problems are new – cars, chemical industries and hardwood from our Rainforests – are being exploited at a faster rate than the natural environment can provide them. That is why modern man is living in air full of gases, polluted rivers and intense, agricultural areas that have replaced natural vegetations.

Since the end of the last glacial period the Netherlands and her surroundings have been rich in natural forests during a long period of time. An ongoing and fascinating debate amongst scientists is the unanswered question on the surface and expansion of the natural primaeval forest of the Dutch territory. The woods of Beekbergen (Beekbergerwoud) could have given us a great quantity of information on this topic, as it was and is regarded up to 1876 as the last “primaeval” forest of the Netherlands. In that year the forest was cut down completely, today it is an agricultural area and as the Dutch are experts in recreating and reshaping their territory the first steps have been taken to let young trees shape the Dutch primaeval forest of the 21st century within a few years. But after all, we cannot be certain about how the Dutch forest looked like before collectors, farmers, hunters, *nouveau riche*, businessmen, pedestrians, landagents and nature managers started to set their marks onto our forests with increasing power.

The Bialowieza Forest is situated in Poland.

“Heard of”, “read about”, “been there a few times”, “if only I am able to, I’ll go there...”

This report would like to tell you some things in a pleasant way.

- The Bialowieza Forest is the last “primaeval forest” within the European lowland – it is a scarce and precious type of forest which will not be harmed though by reading more about it;
- On the change of the 20th into the 21st century decisions have been made that will at least influence the natural future of the forest during the coming hundreds of years – and possibly determine her future;
- It is a virgin forest, but it is not unassailable. We are able to preserve it – but as easily we are able to hurt its deepest souls and impose her onto a number of coming human generations in an unnatural state of desintegration.

As noted before, the Bialowieza Forest has preserved in Poland (and in Belarus). By this we mean that the soil of the forest is original and pure and that the types of forests actually present are still partially (nearly) undisturbed. Also we mean that all biodiversity is directly connected to conditions like our climate, water economy and the everlasting competition of species. De great variation in species is apparent simply when we take into account the naturally occurring species of mammals that are ever present in the forest.

The European Bison (*Bison bonasus*), the largest mammal on the continent of Europe, is living in the woods of Bialowieza in a number of 550 specimens. It is the biggest population of wild living European bisons and one of three populations on world scale that meets requirements for a lasting and stable local existence of the species.

The forest and surrounding valleys of brooks and extensive, small scale agricultural areas have an important role as a reference on management and development of (semi-) natural areas characterised

by forests or lower vegetations in – for example – the Netherlands. By gaining knowledge of the natural forest of Bialowieza nature conservators have greater possibilities to understand what can be strived for in the dominating less natural parts of lowland Europe. In the Netherlands for example, it allows us to estimate which species could enrich our forests – forests which are currently characterised by an increasing age and a development to a more natural character.

A more general note is that we are able to learn especially from those who possess more knowledge than we do ourselves. Sons are learning for example from their fathers, while a student will learn from tutors and professors. In managing natural areas we take a look into the forests of our neighbour – which could be Poland – to understand if we can improve our own situation. The Dutch with an interest in the natural area should be like sons or students. As the Dutch forest is young compared to that of surrounding countries and to the natural situation the people involved can especially learn from the oldest forest ecosystems of Europe. The ones who recognise this truth will find magnificent examples with outstanding beauty under the oaks of Bialowieza Forest.

Unfortunately this report cannot be a fairy tale. It has been written about 150 years late for that. In the years around 1860 the Russians introduced a network of sandy roads. Every 1067 meters a path was secured in north-south and east-west direction. During the first World War the occupation from Germany exploited the natural growth of the forest that would cover one third of a century. An impressive number of traces remain. First of all the impact of this over-exploitation on the forest ecosystem, then the construction of a narrow gauge railway with a length of nearly one hundred kilometers including slopes and the nearly final execution of the lowland European bison. The last animal, which had its last place of living in the Bialowieza forest, got extinct shortly after the war in 1919. Although silence took hold of the forest again after the war, the level of woodcutting was higher than in all pre-war times. European bison was reintroduced from a small number of cultivated specimens, but the average thickness and age of the trees kept going down every year. The tree composition of major parts of the forests was being adapted by man, favouring notably Pine and Spruces, whilst Oak and Ash handed in their share. A “strict reserve” covering 5.000 hectares was being erected in the middle of the forest, but the way of harvesting wood switched from manually, by means of horse carts and for a local market to mechanised woodproduction, using chainsaws, tractors and trucks and changing the market area to regional, national and international.

Frank Verhart

Onderstraat 1
3770 Kanne (Riemst), Belgium

0032 – 12393624

fverhart@hotmail.com

<http://www.franknature.nl>

1. Points of critics

On July 1 2003 a new management plan for the forest of Bialowieza came into force. It is a controversial plan. Several institutes in Poland, amongst which the World Wildlife Fund and the "Institute for the Preservation of the Bialowieza Forest", expressed their discord in relation to a number of principles of the plan.

Critic is being expressed against three principles:

1. The ban on logging trees in forest stands aged of more than hundred years has been lifted.
2. The cutting of Spruces that are infected by Bark beetles (*Ips typographus*) remains allowed in the managed part of the forest, as well as in forest reserves and in a part of the Bialowieza National Park.
3. Multipurpose forest-management is not the most appropriate type of management in (relicts) of a primaeval forest.

1. One of the aspects in the management plan that is being criticised is the end of the prohibition on cutting trees in stands aged over one hundred years – so called "old growths". These stands are amongst the most natural ones outside the official forest reserves and are of a major value since these stands offer habitats where species live that are limited to the most natural types of forest. It is thanks to the well-spread small-scale old stands of this kind that a part of these critical species has physical possibilities to reach different old stands crossing the ecologically poor young and heavily dominated forests in Bialowieza. The small patches of "old growth"-forest can be regarded as a vital ecological structure which is of major importance for the sustainability of natural processes within an already largely managed forest.

2. Spruces that are being "attacked" by Bark beetles can be cut in order to combat the beetles – this is independent of the thickness or age of the trees. The "plague" of this beetle, occurring since 2001 in masses, is the immediate cause of this. This argument for doing so is being regarded as completely legitimate for cutting old Spruces in the remnants of the original forest structure. This is a remarkable fact, since Bark beetle is just another species of the ecosystem which we refer to as "forest". For centuries outbreaks of this species occur now and then. The natural system developed excellent ways to respond to such outbreaks. One should not fear the death of Spruces – an entirely natural phenomenon in itself. Development of a young structure of forest will start thanks to the vitality and power of nature. More precisely – the development of the forest simply continues and adapts itself immediately to the new circumstances. If we desire to live in a Europe in which a primeval forest persists we should respect this natural response, which acts freely and independent of forestry management plans that are being carried out within a time span of four to ten years only.

3. Multipurpose forestry-management serves several goals. In general the forest functions of nature conservation, recreation and exploitation (wood cutting, water management) are being mixed by this way of management. This method is – in view of the preservation and development of natural values – of major value within forests that have been traditionally aimed mainly at wood production. In these forests a great number of possibilities to expand the natural values are apparent. In more or less natural forests like in Bialowieza, and especially within the "old growths" mentioned before, multipurpose forestry does not guarantee an optimal natural situation within the forest. Since the Bialowieza forest has been allowed to develop itself without major human interference the most natural forest which we can think of has grown up. That is why forestry management principles "at once" lead to strong pressure on the soil as a result of work with tractors, a decrease in the age and thickness of the average tree, unnatural selection of strong trees and other aspects. Although it is possible to harvest wood to the FSC-standards from a primeval forest, it has no more meaning that the standard for this product is being met. But this standard is based on natural qualities in man-made forests – it is a means to protect unnatural forests in a better way, but can be more or less destructive within Bialowieza!

2. Harvesting of wood

In considering the current level of the harvesting or cutting of wood within the Bialowieza forest a comparison to different part in our history is an appropriate way to better understand its impacts.

- **Ca. 2000 before Chr until 1500 after Chr.** For many centuries man did not interfere with what happened in the Bialowieza forest. Man was subordinate to the forest – beside that this wilderness of natural woodland had less or no meaning to the people of that time.
- **1500 – 1915.** While in Europe a great number of virgin forest were in the phase of disappearance the Bialowieza forest remained as one of very few forest complexes in which the significance of changes was small. As the forest was being “protected” as the hunting grounds of royal families from Poland and Lithuania others had no or restricted rights. Only on a local scale wood was being cut in order to build houses and for heating. Ca. 1860 an extended network of road was being constructed within the forest complex, which directly powered the accessibility of the forest for forces alien to the natural systems and should be considered as a major threat.
- **First World War.** German occupation led to the cutting in 5 years of wood growth that takes 30 years. This “plundering” led to a severe affection of the natural state of considerable parts of the forest. Century old trees with an extraordinary thickness were cut and new infrastructure was built – 100 kms of narrow gauge railway for forest exploitation.
- **1931.** Constitution of a Bialowieza National Park covering ca. 4.500 hectares, in which cutting of wood or exploitation of other products from the forest (berries, fruits) was strictly prohibited and access has been restricted for visitors.
- **After the first World War** the incredible overexploitation of the natural forest comes to an end, but is continuously at a higher rate than during the long period before the 20th century. During and after the second World War the level of harvest once again increases quickly. After the second World War the forest is divided into a Polish and a Belarussian / White-Russian part. Although the forest is of limited economical value for Poland, the cultural importance is incredible in the view of the function it had for the Polish royal family during centuries of time.
- **1994.** Expansion of the Bialowieza National Park – now covering about 10.000 hectares or about 1/6th of the Polish part of the Bialowieza forest.
- **January 1, 1998.** The Polish government introduces a strict ban on cutting and logging trees aged more than one hundred years. The new regulation offers a more or less efficient protection to the remaining stand of the original primeval forest. However, an exception on the new rule is made for those Spruces that are being “attacked” by Bark beetles. The result of this exception is that this tree species – which is one of the most economically valuable in the forest – is being cut, even within existing reserves, the Im. Szafera landscape reserve and the part of the Bialowieza National Park that has been added in 1996 to the existing National Park.
- **January 1, 2001.** After more than a decade of preparations, research and proposed alternative ways of income for locals, the projected expansion of the Bialowieza National Park to cover the whole territory of the forest is being rejected by the Polish government.
- **July 1st, 2003.** The ban on cutting trees aged over one hundred years is lifted by the newly elected government of Poland. As a consequence the level of harvesting wood in Bialowieza increases dramatically at once. The new management plan for Bialowieza allows an increase in the cutting activities from the 120.000 m³ to over 150.000 m³ starting in 2003! (according to Polish NGO's citing the Polish State Forestry Administration statistics!). The abolishment of the prohibition again allows foresters to cut century-old Oaks and Lindens, which so far does not at all or seldomly happen since it is “common sense” amongst foresters and citizens of Bialowieza to respect these majestic trees. However, the law allows cutting of these trees since July 2003 and therefore strong supervision is a must to prevent that wood-cutting activities are being shifted to these old trees – that date back into the truly undisturbed primeval times of Bialowieza forest!

3. Arguments for a strict reduction of harvesting wood in Bialowieza

1. **Forest developed naturally during 4.000 years.** Bialowieza Forest developed itself since her coming in existence, ca. 4000 years ago, when the changing climate allowed the spontaneous growth of forests again. It developed itself into the natural forest which is (still) partially existing today. Without any appreciable human influence a stable system developed with a wide range of variation of well mixed types of woods. It is inconceivable to think that man is able to increase the ecological value of the remaining natural stands by means of multi-purpose forestry management principles.
2. **The most natural lowland forest of Europe.** The Bialowieza forest is being characterised by specialists as the “most natural forest ecosystem within the temperate climate zone of the European lowland”. On other localities, especially on this scale, comparable conditions have been lost already a number of centuries ago.
3. **Poland will be a “prosperous” country of the European Union on short term.** Should there be a forest complex within the actual countries of the European Union which would be comparable to the Bialowieza forest, it would not be unrealistic to suppose that the society of the concerning country would demand a strict protection of the area in case. If the European Union is to be seen as a group of countries that unite their common interests, the importance of the natural value of the Bialowieza forest is of eminent important in this regard. Protection on European level will be a crucial counterweight to the imput that the European Union gives to boast projects in Poland and other EU-countries concerning reconstruction of urban areas and implementation of infrastructure.
4. **The durable economical profits from forestry are restricted.** The financial benefits from wood production within the Bialowieza forest has strictly limited perspectives to increase the wealth of the local citizens. More strikingly is that most “profit” can be made through the direct breakdown of the historical value of the forest – which is the cutting of trees in the relict stands of the original forest, which leads to disfunctioning of natural processes during decades or even centuries. Within the Bialowieza growth in terms of wealth based on forestry activities can be contributed directly to the breakdown of the natural forest, which has grown the most economically interesting trees herself.
5. **A durable counterpart in a dynamic society.** The Polish society too is being characterized by an increase in work productivity and a more intense utilization of the space available. For most this is true in the larger cities, but due to the development and construction of modern infrastructures the increase can be noted in the rural areas as well. In vast natural areas the human mind regains power and finds her rest very quickly. Moreover, nature is an important “teacher” for a great number of people. And, on other locations in the (Northeast-) of Poland protected and unprotected natural areas are situated that will be severely damaged or destructed in the near future as a result of the modernization of the infrastructure.
6. **Science and education.** The preservation of natural areas in other parts of the European lowland avails strongly to the existence of a preserved undisturbed ecosystem in which students, professionals and interested citizens have legions of opportunities to learn about and realize the importance of protection of nature and the potential ways of development of natural ecosystems elsewhere. A “primeval forest” is by definition a source of enormous value when the extremely varried sources of genes and the discovery and (scientific or medical) meaning of yet undiscovered species, amongst which insects, are being taken into account.
7. **Alternative opportunities for development.** Bialowieza and her surrounding villages have disposal of a number of possibilities to (better) develop their touristic potential. There is an increasing national (Polish) and international demand for recreational possibilities that aim mainly on experiencing nature – her landscapes, her circle of life, her species and so on. The Bialowieza forest region has pre-emilently opportunities to offer a very broad scale of offered types of leisure, in which the scale of the offered product can vary and the recreational possibilities offered should be aimed purely at the joy of observing and relaxation in nature of

exceptional quality. The entry of Poland into to European Union is a move which increases possibilities of change in the structure of employment around Bialowieza in villages and cities.

4. Politics and planning

The considerable area of the Bialowieza forest, a character of virginity in itself, make the forest to a prestigious object of both (international) societies for conservation of nature as well as large organisations that support the view that timber extraction leads to financial benefits and is an activity which is accepted by society as an ethic and acceptable act. For exploiting organisations the forest is appealing thanks to amongst others her size and the wages of forestry workers, which are truly low in the Northeast of Poland – an agricultural and scarcely capitalized part of the country.

The forthgoing and strong commitment in the political field of a number of international movements – with opposed interests leads to a strong increase in the contradistinctions between parties. This leads to many complications regarding a stable development in the area, which may have substantial impact on the “natural” aspect of the Bialowieza forest. The political situation is particularly complicated.

5. Impasse

In fact a clear impasse is visible within the Bialowieza forest region regarding the future of the forest. The “battle” which was fought especially during the second half of the nineties to class the whole Polish part of the forest as National Park did not lead in the end to a true protection of the vulnerable woodlands as such.

In regard of the partially exceptionally natural character of the forest this can be regretted, since the status of National Park is the highest possible rank within Poland to protect natural monuments. The objective of sustainable forestry which the state, being the owner of the unprotected forests, adopts, does by no means guarantee the preseverence as such of the original characteristics of the forest for our offspring or as a proof of our honour to Europes last true primeval lowland forest.

The prohibiton to cut trees aged over one hundred years in 1998 has been a giant leap towards effective protection.

The decision of the Polish government that the Bialowieza forest would not be integrally protected as a National Park has been a great, but contestable step. The prospect on an effective protection has nearly completely been faded away.

The decision of the Polish government to allow logging of trees aged over one hundred years in July 2003 is a considerable attack to the future of the natural character of the Bialowieza forest.

For the time being there is no prospect for the protection of the forest of primeval origin, which has been able to manage herself since time when climate allowed natural forest growth.

The European Union should, possibly even more than the Polish government, feel responsible to defend and protect the natural communities of the Bialowieza forests and should act so. It cannot be accepted by society that the Bialowieza biodiversity and unique character is levelled out in the next decade for short term economical reasons.

Let us fight to preserve the (yet unprotected parts) of the Bialowieza forest!