



Krzysztof Fronczak

signs of the times

THE STATE FORESTS: PAST AND PRESENT

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The beginnings of the State Forests, which go back to the end of the First World War, were as difficult as the rebuilding of the independent Polish state after more than a century of partition and rule by its neighbouring countries. The short period between the two world wars saw the establishment and development of modern forestry in Poland. The structures created then to manage the ever increasing state ownership of forests were robust enough to deal efficiently with the devastation caused by the Second World War. After the war the State Forests embarked on a massive afforestation programme whilst at the same time protecting the green resources from the effects of the centralised socialist economy which prevailed for the next 50 years.

The socio-political changes at the end of the 20th century brought new challenges for the State Forests which has successfully adapted to the requirements of the market economy.

This book is a history of the State Forests, the organisation which from its inception in 1924 has managed the national forest resources in Poland continually except for the period of the last war.

ISBN 978-83-61633-99-0



The State Forests
Information Centre

Krzysztof Fronczak

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**The State Forests
Information Centre**

**Publication commissioned
by the Directorate-General of the State Forests**
Warsaw 2013

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Cover photographs

Tadeusz Chrzanowski, Waldemar Czado, Paweł Fabijański, Krzysztof Fronczak, Cezary Korkosz, S. Mucha ("Ochrona Przyrody" 1929), Faculty of Forestry at the Poznań University of Life Sciences

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ISBN 978-83-61633-99-0

Prepared for printing by

PLUPART

Printed and bound by

ORWLP Bedoń

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PART I





The return of first bison to Białowieża, 19 September 1929
(J.J. Karpiński)

- ◀ 19 November 1930. Conference of the State Forests directors, chaired by Adam Loret and attended by the Minister of Agriculture Leon Połczyński (Z. Kopera, "Echa Leśne" 1931)

the beginnings

THE BEGINNINGS

The State Forests as an organisation was established in 1924 but its beginnings can be traced back to the latter period of the First World War. Poland was just beginning to emerge as an independent state after over 120 years of partition and rule by its neighbouring countries. On 3 February 1917 a proposal was put forward by the Forestry Section of the Central Agricultural Society to the provisional Council of State of the Kingdom of Poland to create the State Forests in the Congress Kingdom, the territory which at the time was under the German occupation. Almost a year later, as the independent Polish state structures were being formed, the responsibility for forestry was given to the Ministry of Agriculture and State Property. From 1 March 1918 the newly established Forestry Department within the Ministry was first led by the forester Józef Miłobędzki and then, from 16 October of that year, by Jan Miklaszewski, an authority on forestry matters.

From the mid-October 1918 the Polish authorities began to acquire the responsibility for the forests from the occupying German and Austrian administrations. On the Armistice Day of 11 November 1918 foresters, led by Józef Miłobędzki and supported by the military, officially took possession of the forestry headquarters in Warsaw.



Józef Miłobędzki ("Echa Leśne" 1938)



The Ministry of Agriculture building where the Forestry Department was located in the inter-war years ("Echa Leśne" 1928)

In 1919 the Polish state controlled only 1.24 million hectares of forest stands but in the following year 1 million hectares of forests in the former Prussian-occupied and eastern territories were added. By 1922, as the national borders were taking shape, this was further augmented by forests in Upper Silesia, central Lithuania and in the western territories, as well as by various smaller private estates. Many of these forests bore fresh marks of war destruction, either because of ruthless exploitation for war effort by the occupiers or because they were in the front lines of military action. Just after the end of the First World War the losses in forest resources were estimated at 60 million m³ but

in Poland the Bolshevik war continued until October 1920, causing further destruction.

In August 1919 the Ministry of Agriculture and State Property took charge of agricultural and forestry matters in the territory previously occupied by Austria. Early in 1920 four regional directorates overseeing the state-owned forests were established in the territory formerly occupied by Prussia: Poznań, Toruń, Bydgoszcz and Gdańsk. The Warsaw regional authorities also included the formerly separate region of Upper Silesia and Cieszyn forests and in the eastern parts of the country Białowieża, Łuck and later Vilnius regions were established.

Although as early as 1918 the newly created Forestry Department included a section dealing with privately-owned forests, there was a growing anxiety and apprehension among the forest owners who were unsure of the future ownership status of the Polish forests. Many owners who feared full nationalisation of forests resorted to felling, further destroying already depleted forest stands. The government then added to the problem by issuing a decree of expropriation of forests in 1920 and in 1923 a decree which legally obliged the owners to deliver, without payment, a specified amount of timber for the post-war reconstruction effort (earlier this burden was only enforced on the state-owned forests). The uncontrolled felling resulted in oversupply of wood and eventually in a complete collapse of the timber market. In 1926 the price of timber was half of the pre-war price.

The economic conditions effecting forestry were only one of the problems the newly established state administration had to deal with. Poland had been partitioned for more than a century before the war and each of the three occupiers had developed different principles of forest management and different



Pine forest in the Kromnów forest district
(J. Jaworczykowski, "Echa Leśne" 1930)

administrative structures which were mutually incompatible, especially at the lower and middle levels. The statutory regulation was even more inadequate and the government initially adopted a policy of small steps, issuing regulations which were fragmentary and lacked cohesion.

the momentous year 1924

THE MOMENTOUS YEAR 1924

It was not until 1924 when the statutory regulation of the state-owned forests began to take shape. On 28 June that year, on the strength of the Act on the State Treasury and Monetary Reform of 11 January 1924, the President of the Republic of Poland issued an ordinance concerning the statute of an organisation named “Polish State Forests”. The ordinance clearly defined this organisation as an entity which was separate from the state budget, which had legal personality and whose main purpose was to maximize profit. The independent administration of the state forests was to be based on the generally applicable civil law.

It is important to acknowledge the context in which that document was created. In December 1923 Władysław Grabski, the newly nominated head of the government, was given the difficult task of stabilizing the country's economy and reforming its finances. It was imperative that the new currency, the zloty, was stable. Grabski's reforms were based on the premise that a third of the Treasury's income from state enterprises was to come from the sales of timber from the state-owned forests.

A significant detail of the ordinance of June 1924 was the three-tier management structure which still characterises the State Forests today: the General Directorate at the top of the organisation, with the regional directorates below and forest districts at the lowest tier.

The proposed, unequivocally commercial, business model was fiercely opposed by foresters

DZIENNIK USTAW RZECZYPOSPOLITEJ POLSKIEJ.		
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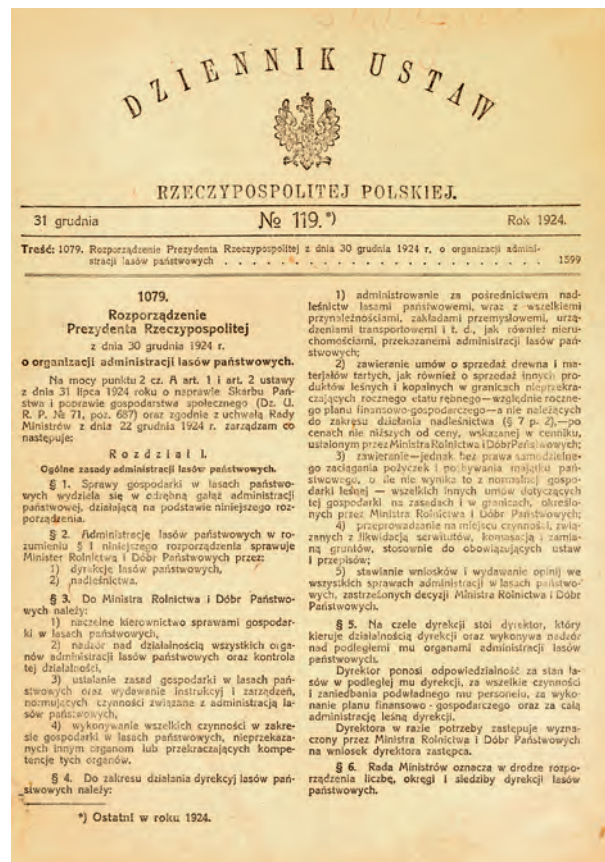
Journal of Laws (Dziennik Ustaw RP no 56 of 1924) containing the decree of the President of the Republic of Poland of 28 June 1924 on the statute of the organisation “Polish State Forests”

and their unions who believed that the State Forests had more to offer than just timber production. Partly as a result of these protests, the ordinance of June 1924 was replaced on 30 December 1924 with a new directive which defined the management of forests as a branch of the state administration. In the regions the State Forests directorates and subordinate forest districts were to manage not only forests but also associated industrial plants, transport facilities and other related entities. The General Directorate was abolished and the forestry economic policy became a domain of the Ministry of Agriculture and State Property.

The new organisational structure received a mixed reception among the foresters. Adam Loret, who later became the first Director of the State Forests, assessed the situation in his book "Five years on the economic front, 1926-1931": *The new structure was not implemented in the following years and the state forests remained administered in a haphazard way (...). Lack of cohesive administration resulted in disorganised production. Each region differently interpreted the main issues such as forest management, investment, level of exploitation, production, supply and pricing policy.*

Adam Loret believed that the situation only began to improve when a new office of the Special Delegate for Administration of the State Forests was established on 1 October 1926.

The next stage of development was a decree on management of state forests issued by the President of the Republic of Poland on 22 March 1928. This defined the principles of operation of the state forests holding and specified the situations in which forest stands could be replaced with a different type of land use (but art. 2 stated that the general principle was that *all forest land should remain as forest*). The decree specified the competences of different government departments in relation to the administration of some categories of state forests, thus putting a halt to deforestation. It also



Journal of Laws (Dziennik Ustaw RP no 119 of 1924) containing the decree of the President of the Republic of Poland of 30 December 1924 on the administration of the state-owned forests.

outlined the legal principles of cooperation between forestry and other national industries.

Both above mentioned decrees of 1924 and 1928 primarily focused on the regional forest administration, with the Ministry of Agriculture being the central governing body. This was changed by the

ordinance issued by the President of the Republic of Poland on 3 December 1930, which established the Chief Directorate of the State Forests as an executive organ for the Minister of Agriculture to supervise the administration of the state-owned forests. It also re-defined the status of the State Forests as not only a branch of the state administration but also as a separate economic organisation responsible for its own development. The presidential decree of 30 September 1936 reinforced these changes by giving the organisation its official title “The State Forests”. Although it did not have legal personality, it was given wide-ranging economic freedom based on the principle of self-finance. A separate fund was

created for the purchase of private forests and land for afforestation.

This historical perspective on the legal and statutory aspects of the creation of the State Forests helps to appreciate how, from the chaos of post-war changes, a new and effective organisation was beginning to emerge. The law not only helped to establish the new organisational structure but also created the market. The legal complexities of situating the State Forests and forestry within the new state structure were also influenced by two conflicting doctrines: the liberal forest policy characteristic of the St. Petersburg school and statism which advocated state control of forest policy.

Jan Miklaszewski

– pioneer, organiser and scientist

JAN MIKLASZEWSKI – PIONEER, ORGANISER AND SCIENTIST

Jan Miklaszewski was a leading advocate of the liberal forest policy who gained reputation as an experienced forester, competent civil servant and efficient organiser. He and his team pioneered the establishment of the forest management structures in independent Poland.

Jan Miklaszewski was born on 7 February 1874 in Łowicz in the family of a railway official. He graduated from the St. Petersburg Forestry Institute in 1898. During his time at the Institute he became an active member of the outlawed Polish Socialist Party. He was arrested for his political activities and imprisoned in St. Petersburg. On his release from prison in 1900, whilst still under supervision of political police, he found employment in forest management on the private estate of the Zamojski family. He promptly resumed his political activities by smuggling banned literature and political activists (including Józef Piłsudski) across the Austrian border. He was arrested and bailed, arrested again and finally given a deportation order. He escaped to Galicia, then under the Austrian occupation, where he continued to work in forestry. He returned to his post on the Zamojski estate after the amnesty in 1905.

As the new state structure of independent Poland was beginning to emerge, Jan Miklaszewski moved into civil service in the autumn of 1918. In 1919 he quickly moved up the ranks and in 1921 became the Director of the Forestry Department in the Ministry of Agriculture and Rural Reform. He held that post



Jan Miklaszewski ("Echa Leśne" 1930)



The forestry pavilion at the National Exhibition in Poznań, 1929: Director of the Forestry Department J. Miklaszewski with his staff and guests ("Echa Leśne" 1929)

for the next 10 years until his Department was disbanded when the Chief Directorate of the State Forests was established in 1931. He then moved to the Warsaw University of Life Sciences and devoted himself to research in forest policy and administration and forest management. He became a professor and in 1936 was elected as the rector of the University. He held this position through the war, risking arrest

and having to hide under a false name when the University was forced underground in occupied Warsaw, until his death on 7 February 1944.

Jan Miklaszewski's contribution to the development of forest science is enormous. He worked tirelessly to establish new schools and departments within the Warsaw University of Life Sciences, as well as new laboratories in the experimental forests in Rogów in

central Poland, where he was a director of research from 1934. He wrote numerous research papers and was the author of the seminal work “Forests and forestry in Poland”, which was declared one of the most outstanding works in professional literature by the International Institute for Intellectual Cooperation in 1929.

Supporters of the liberal doctrine, including Jan Miklaszewski, believed that low profitability of forestry leads to insufficient capital accumulation which forces the state to limit its forest ownership

to the necessary minimum, justified by reasons such as protection or defence. They were prepared to outsource the costly forestry work and timber processing to the private sector.

Supporters of statism, the opposing doctrine in forestry, were of the view that timber production, although important, was only one of the many functions of forests. Adam Loret, the future Director of the State Forests, was a strong advocate of this doctrine, which he promoted in professional literature and later through his work.

private versus state forests

PRIVATE VERSUS STATE FORESTS

Adam Loret firmly believed in the executive powers of the Special Delegate for Administration of the State Forests. Because of the influence of the Special Delegate the Ministry of Agriculture abandoned the wide-spread system of licences for felling in the state-owned forests (in 1926 the long term licences amounted to 2 million m³ of timber). In abandoning the licensing system, the Ministry took a view that

allowing forest exploitation by timber traders not only limited the profitability of forest resources but also caused ecological damage to stands. It became apparent that the State Forests should assume control of raw timber production for trade and industry. The results of the earlier policy were all too apparent: in 1923-25 the volume of timber harvested exceeded by 53% the volume of growth. This unsustainable



Timber rafting on the river Narew ("Echa Leśne" 1931)

exploitation was more prevalent in private forests where the prescribed cut was exceeded as much as twofold. In the state-owned forests the prescribed cut for 1925 (8 million m³) was exceeded by 50%, mainly because of an outbreak of pine beauty moth in the north-west regions.

As mentioned earlier, in 1919 the state controlled only 1.24 million hectares of forest stands. Ten years later, this figure increased to 2.9 million hectares, which represented 8% of the country's territory. Looking at the wider context, in 1923 (first reliable statistics) the forest cover in Poland was 23.1% and the state-owned forests amounted to 31% of the total forest area. Fourteen years later, although the forest cover decreased to 22.2%, the share of the state forests in the total forest area increased to 38.7%.

In the same period, there was a significant sub-division of the privately-owned forests.

Another indicator of the state of forestry during the inter-war period was the share of utility grade wood in harvested raw timber: in 1938 this figure was 68% for state forests, 56% for private forests of large to medium size and only 25% for small private holdings. The low profitability of forest holdings resulted in the lack of interest in investment, especially among the owners of smaller forests. Jan Kloska, an authority on forestry, in his article "Private forests in the first twenty years of independent Poland" ("Las Polski", 11/1938) states that *the majority of small owners barely tolerate their forests and take any opportunity to get rid of them, even if it means turning the land in to wasteland.*

knowledge, science and service

KNOWLEDGE, SCIENCE AND SERVICE

The difference in standards of forest management in private and state forests was also deepening because of the shortage of qualified staff. When Poland gained its independence in 1918, there were only two further education institutions running professional courses for foresters. A decision was made early on to create three new centres of forestry education at the higher education level. In September 1918, the Warsaw University of Life Sciences, including the Forestry Department, was established on the basis of forestry education provided earlier. In Lvov (today in Ukraine) a department of agriculture and forestry

opened at the local Polytechnic. A similar department was established at the Poznań University.

Likewise, there was a shortage of vocational courses at secondary school level. In the inter-war period there were only two such schools in Poland: secondary agricultural and forestry schools in Białokrynica (today in Ukraine) and in Żyrowice (today in Belarus), the latter producing 295 graduates between 1924 and 1939. Graduates of the State Secondary School of Surveying and Timber Industry in Łomża also found employment in forestry. There were several institutions, usually located near forest complexes (Margonin, Bolechów,



The building of the Warsaw University of Life Sciences, Rakowiecka Street ("Echa Leśne" 1937)



Members of the Department of Agriculture and Forestry from the University of Poznań on a field trip to the Ławryski forest district in the Vilnius province, June 1933 (from the departmental archive)



July 1928. Consecration of the standard at the school for foresters in Zagórze. Adam Loret is standing next to the Bishop of Częstochowa Teodor Kubina ("Echa Leśne" 1928)

Zagórze, Białowieża and Cieszyn), which provided basic professional training for foresters, as well as supplementary courses to improve foresters' skills and knowledge.

Important in self-education and supplementary education was professional literature such as guides, popular handbooks, technical guides and calendars. Of great value were also periodicals, from the

scientific ("Sylwan"), to those aimed at practising foresters ("Las Polski", "Życie Leśnika", "Przegląd Leśniczy" or the annual "Forest Calendar" published in Vilnius), to the popular ("Echa Leśne"). Printed literature was much more important in those days, especially for the personnel working in remote areas of the country with little access to other sources of information.



The first issue of the magazine "Echa Leśne", 1924

The State Forests in the inter-war period attached high importance to providing and improving staff education whilst, at the same time, securing funding for the development of forest science. In 1930 the State Forests Experimental Station was established, which continues its work to this day as the Forest Research Institute. These efforts paid off as by the mid-1930 there was no longer shortage of qualified personnel in the State Forests, some of the professionals became highly regarded experts.

In that period there were several unions representing the interests of forestry workers and providing social and financial support. An important forum for exchange of views was the Polish Forest Society.

In 1933, at the initiative of the Association of Polish Foresters and the management of the State Forests, the Foresters Training Corps were established, whose aim was to prepare foresters for auxiliary duties alongside the military. The Corps, whose numbers soon reached 12.5 thousand, mainly focused on organising sporting events and competitions, military training and events of a patriotic nature. Their activity intensified with the growing political tensions and the threat of war. Just before the war almost all forestry workers, from the lowest ranks to the directors, had been trained either with the Corps or with the regular army.

In 1934 a welfare section of the Association of Polish Foresters was established under the name of the Forester's Family. Its aim was to provide help for families of foresters, forest workers and employees of wood processing plants on a national scale. The Forester's Family organised educational and cultural events, recreational activities and holidays, charity events, village libraries and nurseries for children, bursaries, and self-help circles.

nature and people

NATURE AND PEOPLE

Under the leadership of Adam Loret the State Forests followed a course of cautious commercialism. Economic demands, however, did not preclude the need to preserve valuable forest resources, as was demonstrated in the endeavours to protect the Białowieża Primeval Forest (today its territory



The entrance gate to the Białowieża National Park
(J.J. Karpiński, "Ochrona Przyrody" 1930)

stretches across the Polish and Belarusian border). As early as 1921 attempts were made to govern the area as a nature reserve, firstly by establishing a forest sub-district and three years later a forest district named "Reserve", led by the renowned phytosociologist Prof. Józef Paczoski and later by the entomologist Dr Jan J. Karpiński. The "Reserve" forest district was first administered by the Regional Directorate of the State Forest in Białowieża but in 1932 the Ministry of Agriculture directive gave it the status of a special organisational unit within the State Forests under the name "Białowieża National Park".

A similar initiative was pursued by the State Forests administration to create a national park in the Pieniny Mountains in southern Poland, which came into fruition in 1932. This was followed by the establishment of other national parks and nature reserves, such as in Czarnohorz in eastern Carpathian Mountains (today in Ukraine), in the Tatra Mountains and in Babia Góra. In the mid-1930s national parks and nature reserves covered approximately 35 thousand hectares and were predominantly administered by the State Forest. The Forest Research Institute created a special section devoted to nature reserves.

Forest legislation, as well as forestry practice of the inter-war period, recognized the different categories and functions of protective forests. The 1927 directive on management of forests other than state-owned contained articles on defining and managing protective

forests and gave an exemption from the land tax to private owners of protective forests. The protective functions of state-owned forests were outlined in the mentioned earlier decree on management of state forests, issued in 1928, which distinguished six categories of protective forests: water protective, soil protective, erosion preventing, of military importance, of value to nature protection and those important for health and sanitary reasons (eg. in the vicinity of health resorts). Similar provisions were made in the 1936 presidential decree which established the national forests holding under the name “The State Forests” and added to the list of protective forests the seventh category comprising forests in and around cities and industrial plants.

Nature protection and restoration of threatened species of fauna and flora were high on the agenda of the State Forests of that period. Best known are probably the attempts to save bison from extinction, but much effort was also devoted to other endangered species such as wild horse, lynx, wildcat (*felis silvestris*), beaver and some predatory birds.

There were, however, other developments which had a negative impact on forests at that time. In 1924 the Polish government signed an agreement with a British company, The European Century Timber Corporation (also known as Centura), granting it a 10-year licence to harvest 7.2 million m³ of timber from the forests of Białowieża and the area around the river Niemen. It soon became apparent that the company was carrying out a devastating exploitation of stands where clear cuts were used on areas as large as 100 hectares. The licence was withdrawn in 1929, resulting in a high compensation payment to the company. After 5 years of ruthless exploitation 1.65 million m³ of timber was harvested, and 8 thousand hectares of stands needed restocking. The signs of this devastation are still visible today despite the efforts of several generations of foresters.



Dunajec River Gorge in the Pieniny National Park, seen from Sokolica towards the Trzy Korony massif (S. Mucha, “Ochrona Przyrody” 1929)



The bison pair, Borusse and Biserta, who were bred to restore the species in the Białowieża Forest during the inter-war period
(J.J. Karpiński)

Today, the Centura affair can be seen as an embodiment of the liberal forest policy of the government of the time. Some environmentalists still blame the State Forests for granting this licence which resulted in massive destruction of the primeval forest. But it should be noted that the decision to grant the licence was taken by the

government of the country ruined by the First World War and struggling with financial and monetary reforms. The massive compensation (£525,000) to the British company for withdrawing the licence was paid by the State Forests, which significantly impacted on its budget but saved the Białowieża forests from further destruction.

Adam Loret

– the first Director

ADAM LORET – THE FIRST DIRECTOR

Adam Loret, the first Director of the State Forests, made a significant contribution to the Polish forestry of the inter-war period, its modern structures and the development of the State Forests.

Adam Loret was born on 26 December 1884 in Jasło in the Sub-Carpathian region, which was at that time under Austrian occupation. He graduated from the School of Forestry in Lvov and went on to study forest management at the Saxony Academy of Forestry in Tharandt near Dresden. He then worked at the Branickis estate in Sucha near Żywiec (southern Poland) for 10 years.

He was an active member of the Trade Union of Foresters. After the war he began working in the state administration, quickly rising through the ranks to join the Directorate of the State Forests in Warsaw in 1925 and to become the Special Delegate for Administration of the State Forests in 1926. He moved to a managerial position in the Chief Directorate of the State Forests in October 1931 and became the first Director-in-chief in 1934. He held this position until the tragic events of September 1939.

Adam Loret is credited with integrating and organizing the structures of the State Forests. In 1928 he published his programme of reforms for the forestry sector and was instrumental in the issuing of the presidential decree on management of state forests in the same year. His achievements were wide-ranging: he completed an inventory of forest resources, abolished the system of private sector



Adam Loret, the first Director of the State Forests (NAC)



Adam Loret (centre) at the Nicolaus Copernicus monument in Toruń, c. 1931 (Stanisław Brandt archive)

licences for exploiting Polish forests, contributed to the development of forest management plans and helped to establish the modern timber industry. Under his guidance the Polish Wood Agency (known as PAGED), dealing with export of timber, was established as well as the timber dock in the Gdynia port. In the years 1932-1937 export of timber via sea increased fivefold (in 1936 it amounted to 640 thousand m³ and over 500 thousand m³ in 1937).

During Loret's tenure the State Forests firmly followed the principle of harvesting and processing timber within its own remit. The timber industry flourished with the network of modern sawmills, managed by the State Forests, producing high quality wood. Although Adam Loret led the State Forests towards commercial goals, economic gains were not the only measure of success. Profits were always subordinate to the principles of good forest management.

jest, "Najcięższe" przyrzeki nie dotęły, by
 ochrona lasów w Polsce wynikała nie-
 tylko z obowiązujących ustaw, ale z
 świadomości państwa społeczeństwa - to
 jest domowe zadanie wychowania
 ludu państwa

Loret

Adam Loret on the occasion of the "Day of Forest": the educational role of the "Day of Forest" will be fulfilled when the protection of forests will result not from legislation but from social attitudes. ("Echa Leśne" 1936)

The last days of the first Director-in-chief of the State Forests are not known. In September 1939 he and his staff were evacuated from Warsaw. They packed the State Forests archives and headed east towards Pińsk (in today's Belarus). Before they reached Pińsk, their convoy was stopped by the Soviet tanks and everybody was arrested and sent to prison in Nowogródek. That was where Adam Loret was last seen by his colleagues. No-one knows what happened to him afterwards. He was most likely killed by the Soviets, as were thousands of Polish professionals interned at the beginning of the Second World War.

Adam Loret is credited with being the architect of the economic success of the State Forests, although in some opinions his achievements were largely due to his political alliances. His credo was best expressed in his 1928 publication "On the economic front" in which he presented his programme of economic reforms in forestry: *The importance of forest management is not limited to the economic aspect. Forests have many other characteristics which are important, such as impact on climate, soil and health of the nation. Only the state, as the owner, can manage forests in a rational way in order to maximise the economic, natural and cultural benefits to the country and to the nation, today and in future.*

the war and occupation

THE WAR AND OCCUPATION

The State Forests employees, along with all Polish foresters, fought in September 1939 and during the following years on different battlefields and in the

resistance. In the eastern regions, foresters were considered enemies of the soviet regime and either killed or deported to forced labour camps, where many



Polish deportees felling the taiga in Kostousowo in the Urals, 1941 (Centre KARTA)

died of hunger, cold and inhuman conditions they were forced to endure.

The persecution started when the eastern parts of Poland were annexed by the Soviets and two soviet republics were created in Ukraine and Belarus. Lawrentiy Beria, the notorious head of the Internal Affairs Commissariat, urged Stalin, in December 1939, to sanction deportations of all Polish residents from the annexed areas. People with a military background and foresters, considered to be the most dangerous element for the communist regime, topped the lists of prospective deportees. The first of four phases of mass deportations started in February 1940 when 140 thousand people (27 thousand families), about half of whom were children under the age of 16, were sent to the far north-eastern parts of the Soviet empire. Many never returned.

In the areas incorporated directly into the Third Reich in 1939, the forests were put under the rules of management obligatory in the rest of Germany.



Governor Hans Frank visiting a unit of "Forstschutz", paramilitary corps established to protect forests in the occupied territory of General Government ("Las i Drewno" 1941)



Teofil Lorkiewicz, Head of Forestry in the Government Delegation for Poland, the clandestine government during the Second World War (CILP archive)

The central and southern regions, which were not directly incorporated into the Third Reich, became the "General Government" territory headed by the Governor Hans Frank. Top levels of the administration were occupied by the German officials. Forest management, timber industry and game hunting were controlled by the Forests Department of the General Governor's office, whose head reported directly to the Minister of Forestry



Soldiers of the "Las" ("Forest") battalion preparing for the march to a marshalling point near Przysucha, August 1944
(Z. Zieliński archive)

of the Third Reich. In the regions, mainly lower to middle ranking forestry staff were Polish.

Soon enough, however, the underground Polish authorities, known as the Government Delegation for Poland, began to form under the direction of the Polish government in exile in London. A section responsible for forestry was established within this clandestine government, which was headed by the former regional director of the State Forests in Poznań Teofil Lorkiewicz. He created the Central Council of Forestry,

the underground administrative body, alongside regional authorities based on the pre-war structure of the State Forests. This framework was to support sabotage activities against the Nazi administration, protect forests from ruthless exploitation and document any evidence of forest destruction by the occupying forces. It also had a military role: foresters collaborated with the armed partisan units fighting against the occupying forces and took part in sabotage actions. Support networks at a local level organised



Florian Budniak ("Andrzej"), infantry commander in the Home Army (AK) (Centre), with soldiers protecting a radio transmitter

help, including financial, for the families of foresters and for local people exposed to the brutality of war.

Teofil Lorkiewicz was arrested and executed on 3 August 1944, on the third day of the Warsaw uprising against the Nazi occupation.

The foresters fought in all formations of the Polish resistance movement and on many battlefields of the Second World War. Maciej Borczyński, in his "Almanac of the Polish foresters in combat" published in 1997, estimates their number as 4500. The same source gives a figure of 1650 foresters who lost their lives only in the territories occupied by the German forces, most of them were victims of repression. The death toll in combat against Wehrmacht is given as 60 and as 220 in the resistance movement.

It is more difficult to establish the number of casualties in the eastern regions of the country. It is estimated that about 3 thousand foresters lost their lives when the Red Army crossed the eastern border of Poland in September 1939. The so-called Katyn List contains names of 724 foresters serving in the Polish Army who were executed in Katyn, Mednoye and Kharkiv in the former Soviet Union. The exact number of victims among the foresters and the full scale of suffering during the war and occupation may never be known.

PART II





"Zimne Doty" in the Chojnów forest district, popular with Warsaw residents as a place for recreation (K.F.)

◀ Spruce forest in the Białowieża Primeval Forest (P.F.)

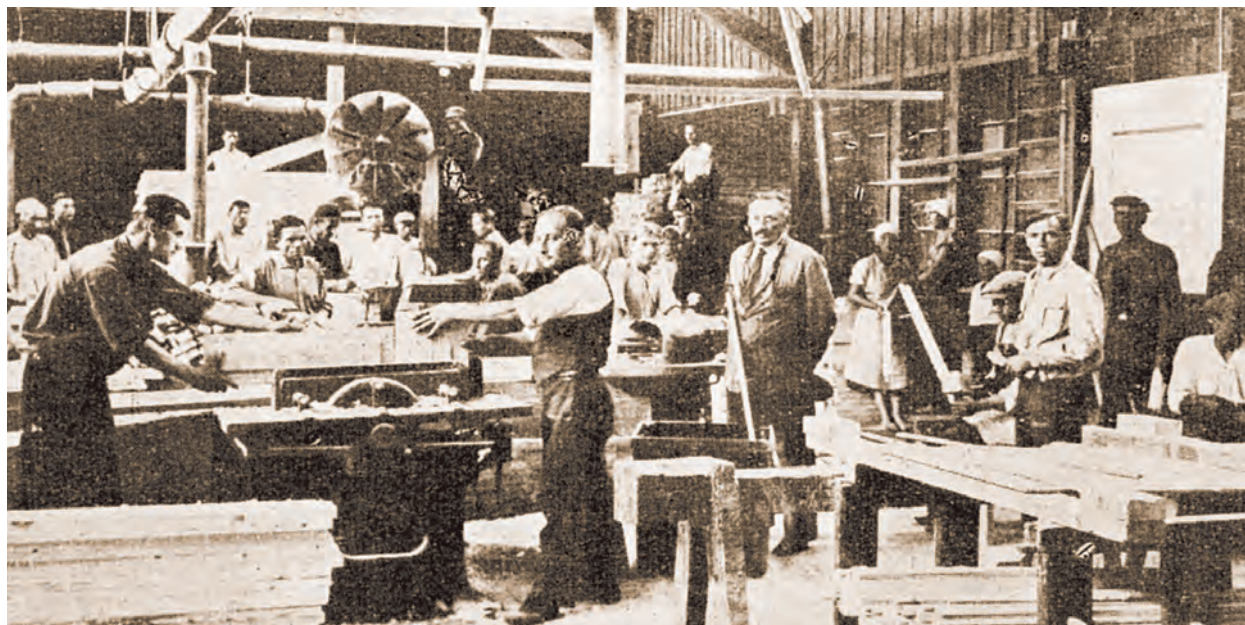
the socialist period

THE SOCIALIST PERIOD

In the few years after the war ended forestry remained regulated by the legislation passed before the war. On 20 December 1949 the law concerning the state forests holding was passed, which was further detailed in the decree issued by the Minister of Forestry and which came into force early in 1950. It outlined the structure and scope of enterprises

operating within the state-owned forests. However, the direction of development of forestry in the post-war Poland was already determined by the new socio-political system.

On 6 September 1944 the Polish Committee of National Liberation (PKWN), the Soviet-backed provisional government, issued a decree on land



Companies employing more than 50 staff on one shift (including those in the wood industry) were nationalised in 1946 (CILP archive)

reform which nationalised private forests with an area larger than 50 hectares in central and eastern Poland and larger than 100 hectares in the western regions. Then on 12 December that year, another PKWN decree nationalised forests larger than 25 hectares per one owner. On 3 January 1946 another act nationalised the main industries: the state took over all businesses employing more than 50 people on one shift, which included most of the wood processing sector. Thus the state owned 85% of the forest area and almost the entire forestry and wood processing industry.

These were the beginnings of the central planning and strict state control of all aspects of industrial activity in Poland. An act of 2 July 1947 introduced the 3-year plan for economic reconstruction, which was followed by the 6-year plan for “the economic development and building of the foundations of socialism for the years 1950-1955” (Act of 21 July 1950). To illustrate the scale of state control, it is worth citing an extract from the 3-year plan: *By 1949 the afforestation will cover the total area of 290*

thousand hectares, including 128 thousand hectares of war-destroyed areas and 22 thousand hectares of waste land, in addition to the areas being currently felled. Central planners determined 3 years in advance the production of merchantable timber (11 million m³ each year), at the same time inadvertently quantifying its increasing shortage (from 0.1 million m³ in the first year to 4.0 million m³ in the third year of the plan).

The 6-year plan was even more detailed: *In 1955 there will be 306 large sawmills, each with its own supply base and transport infrastructure (...). The production of pulpwood has to increase by 114%, long logs by 78% (...). In timber harvest the share of mechanical equipment has to increase to 62% and the share of mechanical transport from 12% to 61%, which will require the 229% increase in the number of tractors and trucks.*

These strict targets had to be unconditionally achieved. It was the beginning of an economy of shortages, also in the State Forests, which prevailed for almost half a century.

organisational

merry-go-round

ORGANISATIONAL MERRY-GO-ROUND

In August 1944 the provisional Soviet-sponsored government in Lublin (PKWN) established the Chief Directorate of the State Forests within the

Ministry of Agriculture, which a year later became the Ministry of Forestry. At that time the area of forests in state ownership exceeded 6 million hectares as



Training in mechanised tree cutting in the Pionki forest district in the 1960s (CILP archive)

a result of nationalisation. At the beginning of 1948 there were 16 State Forests directorates and 917 subordinate forest districts (including national parks). Management of forests was based on the established model of the centralised administration typical of the socialist economy. This became evident when the ordinance of the Minister of Forestry of 27 December 1949 established the Central Board of State Forests, an organ which was to control forestry and supervise functioning of the regions.

The State Forests were administered under the statute passed in December 1949, which outlined its structure and scope and which was in force until 1991. However, in the intervening years the reforms of the internal structure of the organisation as well as of the legal and economic areas of competence of its organisational units were based on the resolution of the Economic Committee of the Council of Ministers, which was a political document of a much lower order. Over the years there were many changes to the constituent parts of the State Forests and even to the Ministry of Forestry which in 1956 merged with the Ministry of Wood and Paper industry, tipping the balance in favour of the wood processing industry. In 1969, in accordance with the Council of Ministers' directive of 18 December 1968, a new economic

organisation was formed under the name the "State Forests", which grouped all enterprises hitherto operating within the State Forests. It included regional boards, various specialized units operating within forestry, other subordinate entities and the Central Board of State Forests.

In 1972 the law on protection of agricultural and forest land came into force, which had an impact on day-to-day running of the State Forests. In 1985 the Ministry of Forestry and Wood Industry was replaced by the new Ministry of Agriculture, Forestry and Food which took charge of the forest resources.

Another change happened at the time of the historic political transformation of 1989-1990: forestry was moved under the administration of the Ministry of the Environment, Natural Resources and Forestry. As a result of the 1991 Forest Act the Central Board was replaced with the Directorate-General of the State Forests and the regional directorates took over from regional boards.

Even this abbreviated history demonstrates that the State Forests had gone through a great number of reorganisations and structural changes in the 45 years of socialist economy. Thankfully, those upheavals did not have a negative impact on the forests themselves.

the turning point

THE TURNING POINT

In the early 1980s it became clear that the centralised socialist economy was leading to bankruptcy. In the State Forests, as in the rest of the country, the structural crisis was affecting the very basis of the socio-economic existence. The disintegrating economy, as well as the

increasing repression of individuals and organisations demanding the democratisation of public life, gave an impetus to the independent union movement, which soon spread across the country and became citizen resistance. “Solidarity” (“Solidarność”) was born.



Signing of the Sękocin agreement, 11 March 1981, Sękocin near Warsaw (KSPL archive)

The momentous events of August 1980, culminating in the historical agreements signed by the striking committees and the government representatives (In Szczecin on 30 August, in Gdańsk on 31 August and in Jastrzębie on 3 September), echoed within the State Forests. On 2 September representatives of striking workers from the regional State Forests authorities in Szczecin signed the pay agreement with the government. Other agreements followed across other regions and on 30 September 1980 the National Committee of Forestry Workers was established in Wrocław, as the industry branch of "Solidarity". "Solidarity" was registered as the first independent self-governing trade union by the Supreme Court on 10 November 1980. Five days later the National Committee of Forestry Workers organised a meeting of the regional founding committees of "Solidarity" in Wrocław, which represented employees in the sectors administered by the Ministry of Forestry and Wood Industry. At the turn of 1980/1981, the number of "Solidarity" members within the State Forests exceeded 50 thousand.

The National Committee of Forestry Workers, now known as the National Co-ordinating Committee of Forestry Workers "Solidarity", signed a historic agreement with the Ministry of Forestry and Wood Industry in Sękocin on 11 March 1981. The agreement, in addition to regulating employment and social issues and creating platform for communication between "Solidarity" and the administration of the State Forests, also outlined the main directions of changes within the organisation and in forest management.

On 27 October 1981 the newly formed National Branch of Forestry Workers "Solidarity" (formerly the National Co-ordinating Committee of Forestry Workers), at its first plenary session, protested against the exclusion of the State Forests from two acts passed on 25 September 1981: on the state-owned enterprises (art. 1 of this act defined a state enterprise

as independent, self-governing, self-financing and as having legal personality) and on self-governing in state enterprises. The union objected to the lack of consultation before the acts were passed. It also rejected the proposal for economic reform in the State Forests, prepared by the Central Board of the State Forests.

The union believed that the State Forests should be based on a model of economic organisation comprising varied multiple enterprises but functioning according to principles specific to forest management. Any reform of the State Forests should be based on a three-tier model of governance.

It is interesting to note that several years later, in 1989, the Round Table Agreement between the government and the representatives of the opposition (mainly composed of the members of now illegal "Solidarity") included a chapter concerning forestry. It was based directly on the agreements achieved by "Solidarity" in Sękocin and at the first plenary session of the National Branch of Forestry Workers and referred to the environment shaping function of forests, the necessity for public consultation before any new legislation on forests is adopted and to the necessity of creating *a new model of forest management whose main aim would be protection of the forest environment and maintaining ecological balance.*

The independent trade union movement did not last long. On 13 December 1981 martial law was declared, all trade unions were made illegal and many of their activists were interned. This also ended the independent Forestry Workers Union "Forest Unity", which was established in May of that year.

Martial law was lifted on 22 July 1983. In November 1983 the Confederation of Trade Unions of the State Forests Workers was established, which was active until September 1992 when it was replaced with the Association of Polish Foresters. This was based on the traditions of the first trade union established



Signing of the pay agreement between the foresters' unions and the Director-in-chief of the State Forests and his deputy, 1986 (CILP archive)

name. There were also other unions operating within the sector, representing different groups of employees.

The political transformations of the 1990s gave impetus to radical changes in the forest legislation. On 28 September 1991 the Parliament of the Republic of Poland passed the Forest Act which related to all forests in Poland, regardless of their ownership. Given that the majority of forests are under the administration



Members of the National Council of the Association of Polish Foresters at the V Congress of Polish Foresters in 1997 (CILP archive)

of the State Forests, this act is considered to constitute the State Forests as an organisation in the new economic reality. The Forest Act 1991, with later amendments, proclaimed that all state-owned forests are administered by the State Forests National Forest Holding, *a state organisational unit without legal personality, which represents the treasury with regard to administration of property* (art. 32). The Act confirmed the three-tier structure of the State Forests, with the Directorate-General at the top, regional directorates in the next tier and subordinate forest districts below, although it also listed other organisational units without legal personality.

On 18 May 1994, the Minister of the Environment, Natural Resources and Forestry issued a decree (No. 50) defining the status of the State Forests National Forest Holding (the State Forests): it stated that it is an economically independent organisation with specific legislative and financial systems. These were further defined by the Council of Ministers decree issued on 6 December 1994, concerning the principles of financial management in the State Forests.

The Forest Act 1991 was the foundation for the transformation of the State Forests from a large, “self-

sufficient”, nationalised organisation based on a socialist model to one based on the free market model. In 1990 the State Forests employed 104 thousand personnel, of which 71 thousand were manual workers. At the end of 2011 the slimmed down State Forests employed 24.7 thousand people, of whom only 2.5 thousand were manual staff working mostly in forest districts. Many of those who left the State Forests started their own businesses providing forestry services and, in so doing, also creating jobs for local people. The market for forestry services began to develop during the 1990s, giving opportunities for many private firms to compete for contracts. The nature of the State Forests has changed from an organisation providing forestry services to one that uses its managerial staff to commission and supervise forestry services delivered by external providers. This new model has considerably improved effectiveness and reduced costs in forest districts. It is worth emphasising that in the forestry sector all these difficult changes took place without any social upheavals and without the help from the state budget, unlike in many other restructuring sectors where the state had to intervene under pressure from a striking workforce.

the environment

at the forefront

THE ENVIRONMENT AT THE FOREFRONT

The turn of the century saw many legislative and socio-political changes with regard to the environment and, therefore, also to forestry. The 1995 Act on Protection of Agricultural and Forest Land specified in detail the circumstances allowing change of use and so gave more protection against degradation, devastation and damage to forest stands. The widely understood protection of the environment, encompassing preservation of valuable ecosystems, biological diversity and sustainability (including protection of forests and afforestation), was the basis of the Environmental Protection Act of 2001 (with later amendments). Another law passed in the same year, the Forest Reproductive Material Act 2001, brought Poland into line with the EU legislation with regard to production and marketing of such material. This law came into force on 1 May 2004, the day of Poland's accession to the European Union. Other laws relevant to forestry, such as game hunting and water management, were also introduced around that time.

There was also a political will to define the direction of forestry. This can be seen in documents such as "State policy on the environment" released in 1991 (and its second edition published 9 years later), "State policy on forests", "Policy on protection and improvement of forests in Poland", "Policy on protection of forest resources in Poland" or "Policy on sustainable forest management in Poland".

All of this output, whether legislative or political, resulted from the international agreements and

conventions, such as Agenda 21, "Forest Principles", "Framework convention on climate change" or "Convention on biological diversity", agreed at the United Nations Earth Summit in Rio de Janeiro in 1992.

The "Convention on biological diversity" was ratified by the Polish Parliament in 1995. The convention on climate change was followed by the Kyoto Protocol of 1997 which included specific proposals for reducing the greenhouse gas emissions. The signatories to the convention on climate change meet annually as the Conference of the Parties (COP) in order to assess the progress in dealing with climate change. The 14th COP was held in Poznań on 1-12 December 2008. The State Forests presented a special programme demonstrating the role of forests in carbon sequestration and counteracting global warming at that conference.

The Polish system of forest legislation implemented in practice the principles of sustainable, multifunctional forest management which is defined in Article 6 of the Forest Act (as amended in 1997) as: *activity aiming at shaping the structure of forests and their utilisation at the pace and in the manner which ensures their biological diversity, high productivity, potential for regeneration and the ability to fulfil, now and in future, their protective, economic and social functions at a local, national and global level, without harming other ecosystems*. These words almost exactly match the definition adopted at the Second Ministerial Conference on the Protection of Forests in Europe (MCPFE) in Helsinki in 1993,



Spruce forest in the Romincka Primeval Forest (P.F.)

of which Poland is an active participant. Poland's involvement, as well as recognition of the achievements of Polish forestry, led to the Fifth MCPFE being held in Warsaw on 5-7 November 2007.

Although the State Forests as an organisation has been given a self-financing status and its main source of income is the production and sale of timber, its aim is not maximisation of profits, as would be expected from



XIV Conference of the Parties (COP), Poznań,
1-12 December 2008 (E.P.)



V Ministerial Conference on the Protection of Forests in Europe
(MCPFE), Warsaw, 5-7 November 2007 (E.P.)

any other businesses. It is significant that the Article 7 of the Forest Act 1991 lists timber production only at the end of a long list of aims of sustainable forest management.

The 1997 amendment to the Forest Act clearly puts emphasis on the non-productive functions of forests, such as protective, environmental and social. A similar approach is stated in the earlier mentioned document “The state policy on forests”, which outlines new perspectives and objectives for the country and for the State Forests.

Another document, “State policy on the environment II”, states the environment-shaping

role of forests even more explicitly, declaring them *“a necessary, if not paramount factor, in maintaining ecological stability, the habitat of the majority of wild fauna and flora (...) and also the main base for the natural heritage of Poland”*.

Therefore, one of the priorities of this policy has been protection of forest ecosystems, restoration of forest areas (for example by introducing native species of trees and shrubs in coniferous monocultures), conservation of mid-forest bogs and objects of special natural importance. All these tasks have been taken on by the State Forests.

forests in distress

FORESTS IN DISTRESS

Polish forests are among the most vulnerable to the negative impact of civilisation in Europe. The condition of their health is far from ideal as a result of many inter-dependent factors. Forest science recognises three main categories of threats: abiotic (caused by inanimate nature, eg. climate), biotic (caused by animate beings) and anthropogenic (caused by humans).

The abiotic threats in Poland are mainly due to climate. There are constant clashes between maritime and continental air masses, which cause frequent weather anomalies such as a large range of temperature fluctuations, unseasonal frost, heavy rainfall and snowfall, sudden floods or long lasting droughts, hurricane force winds, etc. The effects of climate are exacerbated by the characteristics of soil such as moisture content (dropping groundwater levels across the country), fertility and topography of different areas.

In the second part of the 20th century there was an increase in outbreaks of insect pests and fungal diseases, which occurred with high diversity and varied intensity. The health condition of broadleaved tree species deteriorated although they were considered to be more resistant to industrial pollution. Little known species of insects and fungi, which had not caused much concern before, suddenly became more active.

The worst damage to the Polish forests is caused by the cyclic occurrence of folivorous insect species which attack pine stands. The largest outbreaks



Snow damage in the Złoty Potok forest district in January/February 2010 (K.F.)

occurred in the years 1979-1984 and 1992-1994. Trees weakened by earlier insect infestation or by industrial pollution are more susceptible to attacks by secondary insect pests (eg. bark beetle). The most significant damage caused by secondary pests occurred in the years 1981-1985 and 1993-1994. Unprecedented levels of activity were also observed among hitherto marginal insect species.

There was a significant increase in the area affected by outbreaks of harmful insects in the period 1961-1990. Also observed was an increase in the number of insect pest species: in 1961-1970 the mass outbreaks were caused by 38 species (of which 20 were subject to comprehensive control treatment) and the affected area reached 600 thousand hectares but in 1981-1990 the number of species causing mass outbreaks had risen to 56 (control treatment was used against 46 most damaging species), affecting over 7 million hectares. The situation changes from one year to another. For example, in 2011 control treatment was used against 50 insect species and the area covered was 128 thousand hectares, which was larger by 114 thousand hectares than in the previous year.

In the broadleaved stands most of the damage is caused by oak tortricid moths and geometer moths (for example, in 2001 control treatment for these insects covered an area of 1879 hectares but only two years later the same species attacked almost 114 thousand hectares). Serious damage is also caused by cockchafer beetles attacking tree crowns and cockchafer larvae feeding on the tree roots. Most vulnerable to their attacks are nurseries, plantations, regenerated stands and reforested post-agricultural land. In 1995 swarms of cockchafer were observed in an area of 15 thousand hectares, in 2003 on 46 thousand hectares and in 2011 on 121 thousand hectares. Plantations and young stands are also vulnerable to outbreaks of large pine weevil (*Hyllobius abietis*). Most threatened by outbreaks of insect pests are forests in the northern regions of



Installing a pheromone trap to control bark beetle (P.F.)

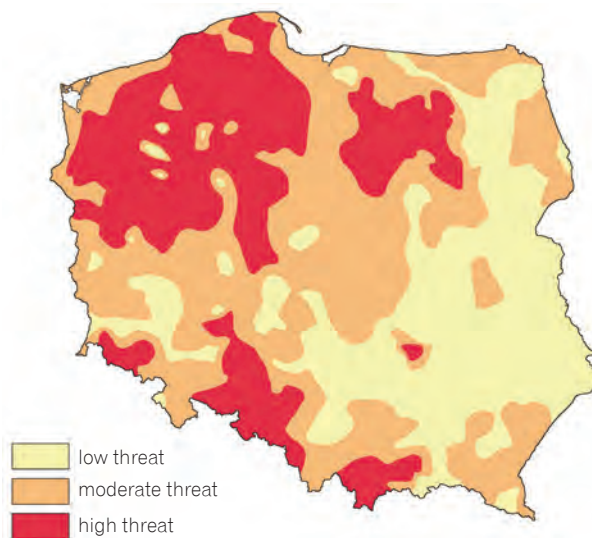
Poland (western areas of the Masurian Lakeland, north-west regions (Pomeranian and Wielkopolskie Lakelands) and southern regions (Sudeten Mountains, Silesia and Beskid Wysoki mountains).

Since 1946 the State Forests has been systematically evaluating the occurrence of main insect pests and infectious diseases, as well as forecasting their spread, in order to prepare in advance any preventive or control treatment.

In the last few decades there has also been an ever increasing threat to forests from infectious fungal diseases. At the end of the 1950s the fungal diseases affected about 100 thousand hectares, in 1992-1995 the affected area has risen to over 500 thousand hectares, in 2001 to over 740 thousand hectares, before dropping slightly to 706 thousand hectares in 2003 and even more in 2011 to just over 400 thousand hectares. Fungal diseases attack many species of broadleaved trees, such as oak, beech, birch, ash, poplar. But the on-going monitoring suggests that although the threat level is high, especially among the stands established on post-agricultural land which are prone to root system

diseases, the dynamic of the increase of that type of threat is diminishing. This is due to the continuing efforts of foresters in improving health conditions of stands and to the decrease in threats originating from industrial emissions.

Serious damage to forest ecosystems, mainly in plantations and young stands, is caused by animals, particularly if their numbers exceed those that forest is able to feed. It is estimated that every year 7% of plantations and young stands fall victim to animals. In the season 2010/2011 animal damage to trees occurred on 183 thousand hectares, including 78 thousand hectares of plantations and 75 thousand hectares of young stands. It is therefore necessary to protect trees from herbivores by installing covers, applying repellents (chemicals which discourage animals from eating young shoots) or fencing off vulnerable areas.



Forest areas threatened by insect pests in Poland
(primary and secondary pests together)



A young pine tree damaged by deer (W.G.)



Sand mine "Kotlarnia" in the Rudy Raciborskie forest district where a 20 metres deep conical sinkhole affected several thousand hectares of forest (K.F)

Anthropogenic threats are mainly the result of atmospheric pollution caused by emission of sulphur dioxide and nitrogen oxides, which are produced by burning fossil fuels in industry, energy generation, domestic heating and transport. These acid gases can trigger a number of diseases in forests, and in some cases even their total dieback. Nitrogen compounds can produce an effect of over-fertilisation of an ecosystem (eutrophication), which in turn can lead to a change in

composition of flora towards proliferation of species which are more tolerant of nitrogen.

Agriculture is the main source of pollution of air, water, and soil with ammonia compounds. The mining industry has a dramatic effect on groundwater levels either by draining the waters away and causing drought conditions or because of landslides which can cause flooding of large areas. Large waste dumps and streams and rivers polluted by saline compounds

released by mines are an unfortunate part of the post-industrial landscape. Tourists and foraging enthusiasts who do not respect natural resources are another hazard to forests, so are common thieves and poachers.

Past aggressive industrialisation, often motivated by political ideology (eg. construction of a massive steel plant on the outskirts of Warsaw near the ancient Kampinos Forest), and several decades of development of “dirty” industries, which often lacked any environmental protection, lead some regions to the brink of environmental catastrophe.

In 1967 the first inventory of industrial damage was carried out throughout the state-owned forests. It revealed that 176 thousand hectares of forest stands suffered damage, 16% at a catastrophic level and 41% at a significant level. The next inventory four years later showed that the area of threatened forests increased by one-third and forecasted that in the next 20 years a fifth of the country’s forest area will be in zones directly affected by industrial pollution. It did not take long to see this alarmist forecast materialise.

the rescue of mountain forests

THE RESCUE OF MOUNTAIN FORESTS

A wake up call for many Poles was the ecological disaster in the Jizera Mountains in the mid-1980s when the local forests began to die. Spruce forests, which were planted in the whole of Western Sudetes from the 19th century onwards, could no longer withstand the increasing air pollution from industrial plants concentrated in the region and from the so-called “black triangle”, the energy generating complex on the borders of Poland, Czechoslovakia and Germany. The foresters had to intensify clearing the forests of dying trees and in some areas (eg. in the Szklarska Poręba and Świeradów forest districts in the Wrocław region) almost the entire timber harvest came from sanitary cutting.

In the Szklarska Poręba forest district the dieback occurred on almost a quarter of the forest area. In 1980-1988, in Western Sudetes, forests had to be removed from the affected area of 15 thousand hectares, resulting in the harvest of 4.6 million m³ of timber. In 1993-1995, the mass spruce dieback in Middle Sudetes necessitated in removal of 3.5 million m³ of deadwood. It has to be stressed that earlier the Sudetes forests suffered a massive outbreak of spruce bark beetle (in 1946-1951), two devastating hurricanes (in 1955 and 1966) and damaging outbreak of larch bud moth in 1977-1982. In 1997 the region suffered unprecedented flooding.

The Polish forestry sector pulled together resources to combat the devastating dieback of forests in the Jizera and Karkonosze mountains. Help

came from many forest districts, the army and young volunteers, as well as from experts from universities and the Forest Research Institute. A purpose built modern container nursery was established in 1992 in the Śnieżka forest district (Wrocław region) to supply stock for reforestation.

Lessons learnt from the Jizera disaster prompted the State Forests to establish the Kostrzyca Forest Gene Bank in Miłków, at the foothill of Karkonosze. Since 1996, the Gene Bank has been collecting and long-term storing genetic resources of forest trees and shrubs. Its role is also to monitor the quality of the forest reproductive material, i.e. seeds from the most valuable seed resources of the State Forests, as well as important for nature conservation seeds from national parks, nature reserves and natural monuments.

The purpose of the prompt reforestation in the Jizera Mountains was to prevent soil erosion and degradation and spreading of weeds. This was not entirely successful despite the renewal being carried out on the area of over 17 thousand hectares in the period 1981-1997. In some cases the whole forest ecosystems had to be rebuilt and in some areas the soil had to be restored. Work started on the programme of restitution of the Sudeten ecotype of common fir. Larch and many broadleaved species, such as beech, birch, alder and mountain ash, have been returned to the Sudeten forests, as well as native spruce.

In the mid-1990s the dieback was in retreat and health condition of forests in the Sudeten Mountains



A dead forest in the Western Sudetes at the beginning of the 2000s (P.F.)

was improving. This was partly a result of stricter environmental law and the industry being forced to invest in environmental protection measures, but also a proof that the efforts of foresters were not wasted.

At the end of the 20th century a decline of spruce stands was observed in central Europe and it also affected stands in the Beskid Mountains. First signs

of spruce decline were already reported in the 1950s and since then it has spread across many European regions. In 2006-2010 the necessary sanitary cutting carried out in Beskid forest districts produced 4.5 million m³ of spruce wood.

The wide-spread spruce decline is attributed to a combination of causes well known in forest science

and practice: from genetically determined to industrial pollution, outbreaks of insect pests and spreading of honey fungus diseases.

At the beginning of this century it became clear that extraordinary steps would have to be taken to avoid another disaster: the “Programme for the Beskid” was established. It covered eight forest districts most affected by the decline and used all available resources. The cost of the rescue operation amounted to PLN 485 million in 2006-2010 and was mainly met from the State Forests’ sales of timber harvested in sanitary cutting. But the next stage of fight against the decline may be more difficult as the revenue from sales of timber have decreased considerably along with the available resources.

The stand reconstruction covered over 8.5 thousand hectares. The spruce-only stands were converted to mixed forests with the prevalence of fir and beech, with the addition of other tree species, including spruce. Only in the higher mountains spruce has maintained its significant presence, as it had centuries ago in the ancient Carpathian Forest. This type of forest is better adapted to local habitats and should be more resistant to hazardous factors in future.

Five years later the sanitary condition of the Beskid spruce stands was back to the level prior to 2006. If the decline remains under control, this will probably be the first case in forestry practice of foresters stopping decline of stands which were artificially planted in the past.

The foresters did everything they could to avert the Beskid forests turning into a desert, however temporarily. Thousands of people (about 3300 during the critical months) contributed to the rescue operation. In August 2007, when felling was at its most intensive, over 1200 loggers and almost 1000 workers debarking insect infested trees worked in the Beskid forests.

Effective rebuilding of spruce stands was possible because of the development of a market for forest



Dieback of spruce forests in the Beskid Mountains in the Węgierska Górka forest district (K.F.)



Young volunteers planting a new forest on the Skrzyczne mountain, October 2008 (K.F.)



Reforestation in the Ustroń forest district which suffered spruce dieback (K.F.)

services. Serving the rebuilding programme was a base of seed and nursery production which used advanced technologies for raising containerised mycorrhizal seedlings. The programme helped to develop forest genetics and regionally based seed resources, especially of forest-forming species.

The artificial rebuilding of stands in the Beskid Mountains was firmly based on the principles outlined in the document “Seed regionalisation in Poland” and an important role was played by the Karpaty Gene Bank, which was established on 1 July 2003 in the Wisła forest district.

the great fires of 1992

THE GREAT FIRES OF 1992

The year 1992 will be remembered as a year of forest fires in the history of the State Forests. A very hot summer and lasting drought created unprecedented fire hazards across the country. August proved to be the worst month for forest fires. On 9 August a fire which lasted two days destroyed 3000 hectares of forest in the Szprotawa forest district (Zielona Góra region). A similar forest area was lost to fire on 10 August in two forest districts in the Toruń region. On the same day another fire was started by sparks from a passing train in the Potrzebowice forest district (Piła region) and spread rapidly destroying 5600 hectares of state-owned forests, 300 hectares of private forests and dozens of buildings in less than 8 hours. Fortunately, there were no casualties.

This was probably the fastest spreading forest fire in post-war Europe, engulfing 500-1000 hectares per hour. If left unchecked, the fire could have destroyed within hours the entire Notecka Primeval Forest, well over 100 thousand hectares. The fire was eventually extinguished by a sudden downpour of rain.

In Silesia (Katowice region) there were 1371 forest fires in total in 1992, a threefold increase on the previous year and twice as many as in the following year. Far the worst was the fire in Kuźnia Raciborska on 26 August. This fire was also started by sparks from a passing train and it spread rapidly over two neighbouring forest districts, despite huge efforts of rescue services. It took four days to control the fire and a month to extinguish fires which had



Fire destroyed almost 5600 hectares of state-owned forests and 300 hectares of private forests in the Potrzebowice forest district (CILP archive)

spread to peatbogs. In total, 9062 hectares of forest were destroyed but the determined action by rescue services saved the remaining 40 thousand hectares of forest, several villages and two chemical plants in Kędzierzyn-Koźle and Blachownia, so averting a massive environmental disaster. Tragically, two firemen lost their lives.

The rescue operation was one of the biggest in recent history. Eleven thousand people were involved, including the army, the police, members of Civil



A total of 9062 hectares of forest was destroyed by fire in three forest districts: Rudy Raciborskie, Rudziniec and Kędzierzyn (J.F.)

Defence, foresters and almost one-third of country's fire brigades. The total cost of rescue, losses to the State Forests and later reforestation amounted to PLN 721 million (at 2010 prices). The damage to nature is impossible to calculate.

Most of the restoration work in the fire destroyed area was completed in 1997, thanks to the help from many forest districts around the country. In total, about 100 million seedlings were planted. The scale of the demand for seedlings and the barren conditions of soil in which they had to be planted gave an

impulse to accelerated development of the seed base, containerised seedling nurseries and *mycorrhizal* technology. Research in those areas was mainly financed by the State Forests.

The experience of fires in 1992 largely contributed to an overhaul of the integrated fire protection system in the State Forests. The Directorate-General commissioned the Forest Research Institute to prepare a report on fire hazard, based on the recent experience. The report, in addition to economic and environmental assessment, recommended that an



Twenty years after the fire: pine, birch and larch are the dominant species in the renewed area of the Rudy Raciborskie forest district (K.F.)

environment monitoring network be installed in vast areas destroyed by fires. It also proposed methods of fire prevention, improved systems of fire detection, fire alerts and forest fire fighting. Based on the report's recommendations, the system of categorizing forest fire hazards was amended and forecasting improved. A new communications network was installed throughout the State Forests territory and improvements were made to infrastructure and equipment. Fire control

zones were modified (the total length of fire control belts in the State Forests reached 17.6 thousand km at the end of 2011; the following figures are also for that year). Emergency access roads (55 thousand km in length) were improved and given clear signage. A new network of observation points was established (639 observation towers of which 200 are equipped with industrial TV cameras). Each regional directorate and each forest district have their own emergency



An observation tower in Sierakowice, in the Rudziniec forest district. The 36 m high tower was built in only 13 days in 2000 (K.F.)

communication network. The State Forests has patrol and fire fighting aircraft at their disposal, as well as its own fleet of rapid response motor vehicles equipped to deal with forest fires before they spread out of control.

The experience gained during the forest fires of 1992 also had an impact beyond the State Forests, notably on the establishment three years later of the country-wide system of fire fighting and rescue. New critical response hubs have been created and civil defence services improved.

the 2002 hurricane

in the Piska Primeval Forest

THE 2002 HURRICANE IN THE PISKA PRIMEVAL FOREST

A devastating hurricane hit the north-eastern regions of Poland on 4 July 2002. The 170 km per hour winds destroyed 45.4 thousand hectares of forests, including vast areas of the Piska Primeval

Forest. The most affected was the Pisz forest district which lost completely one-tenth of its 36 thousand hectares of forest area and one-third of its forests were seriously damaged.



Hurricane damage to forest stands in the Pisz forest district, July 2002 (S.Z.)



The protective "Szast Forest" in the Szast forest sub-district (K.F.)

The clearing up work, coordinated by the Białystok Regional Directorate of the State Forests, began immediately with the removal of fallen trees blocking the forest roads. One of the most important concerns was the prevention of forest fires as the summer of 2002 was exceptionally hot and dry, creating an increased risk of fires in areas containing large quantities of fallen trees and dry wood. Any fire in such areas would have had fatal consequences for the clearing teams, local population and even the nearby town of Pisz. Therefore additional measures were put in place: two forest air

bases were established, patrols and a tower watches were intensified and over 100 km of fire control belts were dug up throughout the three local forest districts.

Four thousand people were involved in the clearing operation and by the end of the year the most affected areas were cleared. Of about 4 million m³ of broken wood from fallen trees, 1.5 million m³ of timber was harvested before any degradation took place (to prevent degradation, the most valuable conifer wood was submerged in local reservoirs). The plan for reforestation of the hurricane damaged areas created by the Białystok RGSF calculated that 136.5 million seedlings would be needed.

However, the dramatic events in the Piska Primeval Forest also had a positive aspect: they gave an opportunity for a unique project of creating an area where all fallen and broken trees were left and natural succession was allowed to take place. This was the beginning of the protected forest established on 29 May 2003 on 475 hectares of land in the Szast forest sub-district. The "Szast Forest" is a unique research opportunity on a European scale, an experimental scientific and educational entity, which may have implications for future forestry practice. It is also used for forest education of society: the local forest district has created an educational trail through the areas naturally regenerating after the hurricane and an observation tower was built within the "Szast Forest".

more forests

MORE FORESTS

The forest cover in Poland in 1945, within the new post-war borders, was just 20.8% and forests occupied 6.5 million hectares of land. The State Forests administered 5.4 million hectares, of which 81% were coniferous forests. These statistics do not give a full picture. The forest stands were devastated by military actions and by ruthless exploitation during the war. The poor condition of forests demonstrated itself in limited biological diversity, soil erosion, disturbances in water relations and in detrimental changes in the landscape.

As mentioned earlier, the post-war 3-year plan for reconstruction assumed afforestation of 290 thousand hectares of land, whereas the following 6-year plan proclaimed the necessity *to afforest all remaining areas of about 245 thousand hectares destroyed by war and to supplement the areas of about 90 thousand hectares where forests were decimated (...). The area administered by the State Forests should increase by afforestation of 90 thousand hectares of poor agricultural land and 215 thousand hectares of wasteland. In total, the afforestation efforts should increase by 220%.*

Thus a large-scale programme of afforestation began. In the years 1945-1970, as a result of systematic efforts of the State Forests, almost one million hectares of land was afforested, increasing the forest cover in Poland to 27% at the end of that period. On average, the annual afforestation amounted to 36 thousand hectares of land but in the years 1960-1965 it reached

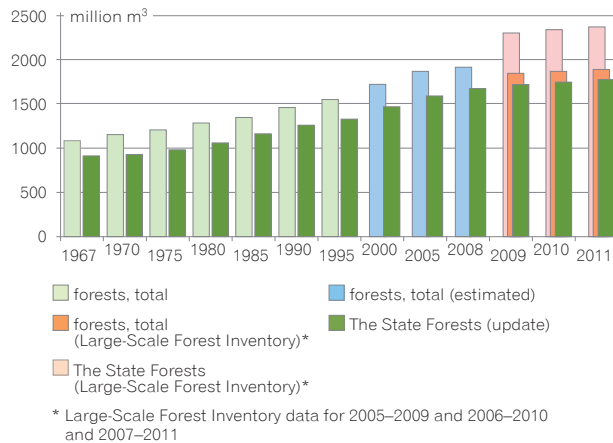


Afforestation in the Barycz forest district in the 1960s
(CILP archive)

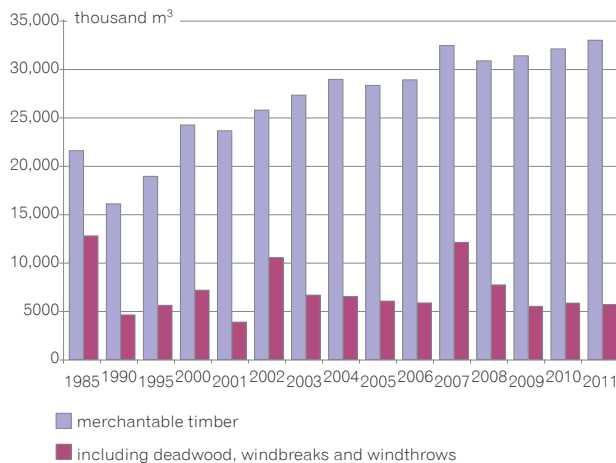
55 thousand hectares per year. This equates to three medium size forest districts added each year.

It has to be stressed that the afforestation was carried out in parallel with the increasing, centrally controlled economic pressure to harvest specified quotas of raw timber, also prescribed centrally. In 1945-1964, the State Forests harvested almost 68% of the merchantable timber growth; in 1966-1970 it was over 71%; in 1976-1985 just under 60%; in 1986-1995 almost 62%. It was not until the late 1990s that this figure began to decrease to around 55-56%.

Despite the continuing pressure to increase timber yield, standing timber resources in forests



Timber resources in the State Forests in 1967–2011, in million m³ gross merchantable timber



Timber harvest in the State Forests (large timber, including deadwood, wind broken and wind thrown wood), in 1985–2011, in thousand m³ net merchantable timber

administered by the State Forests have actually gone up by a factor of 2.7 since the end of the war – from about 695 thousand m³ in 1946 to 1886 thousand m³ at the end of 2011. The total yield from the State Forests in that period was 1.5 billion m³ of large timber. To illustrate the scale of growing utilisation it is interesting to compare average annual yield of timber: in the late 1940s it amounted to 13 million m³, in the mid-1960s it increased to 20 million m³, in the mid-1970s to almost 25 million m³, in the mid-1980s to almost 27 million m³ of gross merchantable timber (with bark and waste). In 2011 the State Forests harvested 32.8 million m³ of net merchantable timber.

By the second half of 1956 the forest area managed by the State Forests had risen to 5.7 million hectares and by the end of 1967 it had risen again to 6.4 million hectares. The rate of afforestation only began to decrease in the 1980s. This prompted the government to act and on 23 June 1995 the Council of Ministers passed the “National programme for increasing forest cover”, which assumed that by 2020 the forest cover will increase to 30% and by 2050 to around 33%. In practical terms it meant that approximately 700 thousand hectares would have to be afforested by 2020 (including 100 thousand hectares by natural succession) and 1.5 million hectares by 2050. The implementation of this programme would be undertaken by the State Forests.

The afforestation work intensified from 1994 thanks to government funding and a loan from the European Investment Bank. This resulted in an average annual area of afforestation rising to 10.8 thousand hectares during the following decade. This represented almost a threefold increase on the average annual afforestation area of 3.9 thousand hectares in the period 1988–1993. Regrettably, the progress of afforestation began to slow down from about 2005. In that year the State Forests planted 6.1 thousand hectares of new forest but in 2011 only 0.6 thousand hectares. (Note: the figures here



Afforested agricultural land in the Podlasie province (P.F.)

represent afforestation, i.e. planting new forest where there was none earlier; forest renewal or reforestation is a separate category and means introducing new generation of forest on land from which forest was previously removed.)

Poland's entry to the European Union in 2004 opened new sources of funding. The EU-supported Rural Development Programme offered subsidies to

private land owners for the afforestation of agricultural land. Initially, this met with interest from private land owners but as the criteria for subsidies changed in the second edition of the Programme for 2007-2013, its attraction diminished.

According to many experts the implementation of the "National programme for increasing forest cover", especially in the private sector, will be further affected



Forest cover in Poland by voivodeship (province)

by the Natura 2000 network encompassing large proportion of forests and other land and resulting in modification of land utilisation, as well as by the required

evaluation of the impact of planned afforestation on the environment. Any changes to the forthcoming new edition of the EU Common Agricultural Policy may also impact on the implementation of the programme.

For the State Forests the main problem for meeting afforestation targets is the shortage of appropriate agricultural and waste land. Because of that, the level of afforestation in the private sector has increased well above that of the State Forests'. Only a decade ago this relation was reverse.

Despite these difficulties the forest area in Poland has increased by 388 thousand hectares in the period 1995-2011, according to the Central Statistical Office. The same source states that forests in Poland cover an area of 9.1 million hectares, which equates to 29.2% forest cover. However, there are significant variations among the regions: the northern and western provinces have the highest forest cover (Lubuskie region has the highest level of 49%) and central provinces have lower than average forest cover (Łódź region 21.1%).

Today the shared opinion is that the planned target of 33% forest cover by 2050 is unlikely to be achieved, although the 30% indicator by 2020 still seems to be within reach.

for the common good

FOR THE COMMON GOOD

After the Second World War there was a renewed interest in protective forests which had already been subject to regulation in the inter-war period. In the document “Instructions for forest management”, issued in 1957, the forests were categorised into two groups: I – protective forests and II – productive forests.

These categories were used until the Forest Act of 1991 came in to force. A decree issued by the Minister of the Environment, Natural Resources and Forestry on 25 August 1992 specifies the rules and procedures for granting protective forest status and details the principles of forest management in those forests. The decree distinguished eight categories of protective forests: soil protecting, water protecting, damaged by the industrial pollution, representing valuable elements of indigenous nature, established within research and experimental areas, seed stands exempt from final cutting, protecting natural environment (habitats of protected species; located near cities or health resorts), and finally forests of importance for defence and security. These categories can, of course, overlap.

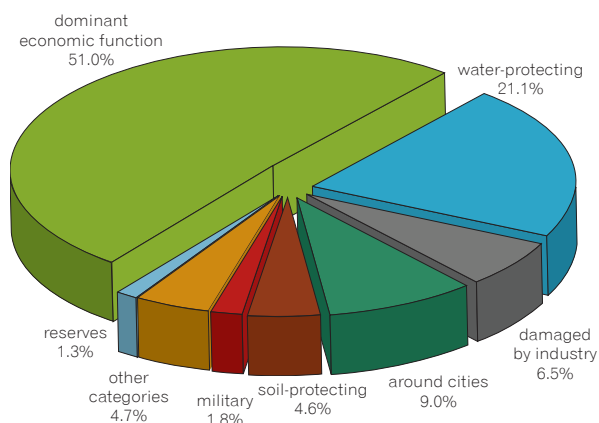
The total area of protective forests under the administration of the State Forests reached 3.37 million hectares at the end of 2011, which is 47.7% of its total forest area, or 49% if nature reserves are included. The largest categories are: water protecting forests with an area of 1.49 million hectares, forests surrounding cities – 636 thousand hectares, forests damaged by industrial



Zielonka Primeval Forest (P.F.)

pollution – 462 thousand hectares and soil protecting forests – 324 thousand hectares. Most protective forests are located in the mountain regions, sometimes whole forest districts have been given protective status. By comparison, protective forests in private ownership cover approximately 64.3 thousand hectares (4.3% of their total area) and municipal protective forests cover 24.6 thousand hectares, 28.7% of their total area). The European figure is below 20%.

Concerns about climate change have brought to the fore the role of forests in carbon sequestration and therefore in minimising global warming. When, in the early 2000s, international emissions trading



Protective forests in the State Forests in 2011

took off, the State Forests saw it as an opportunity to benefit from this developing market. Early on it sponsored work on the legislative aspects of the emissions market but it was abandoned. Then in 2007 a research project funded by the State Forests was launched under the working title “The balance of carbon in the biomass of the main forest-forming tree species in Poland”. This interdisciplinary research was the collaboration between several institutions, such as University of Life Sciences in Poznań (co-ordinator), the Institute of Dendrology of the Polish Academy of Sciences in Kórnik, Warsaw

University of Life Sciences, University of Agriculture in Kraków, Warsaw University of Technology and University of Applied Sciences in Eberswalde (Germany). The research focused on 8 main forest-forming tree species and 12 most common species of underbrush occurring in Poland. Analysis covered 300 areas representing different age classes, habitats and commercial importance of species and attempted to calculate the amount of carbon accumulated in the biomass of the stands, as well as the dynamic of changes in carbon sequestration for different economic models.

The Directorate-General of the State Forests commissioned the Department of Agrometeorology of the University of Life Sciences in Poznań to carry out research on the relationship between climate change and forest ecosystems in Poland and to collect data on net exchange of CO₂ between forest ecosystem and atmosphere. The research focused on a selected area in the Tuczno forest district in the Piła region. Similar research has been done in other countries, for example in Finland, France, Great Britain, Germany, Sweden and the Czech Republic.

The Forest Research Institute has been carrying out research on the relation between the method of forest soil cultivation and the amount of carbon deposited and released.

These are just a selection of research themes which are of interest to the State Forests.

protecting the wealth of nature

PROTECTING THE WEALTH OF NATURE

As mentioned earlier, even before the last war the State Forests worked towards the protection of biological diversity. From the inception of this organisation its active interest in nature protection

was an obvious matter because, as it is currently estimated, about 32 thousand species, 65% of all found in Poland, are closely associated with the forest environment. These include 60% vertebrates, over



A lynx. 60% of vertebrates in Poland are associated with the forest environment (A.W.)



A nest of lesser spotted eagle (G. and T.K.)

80% fungi (macromycetes), the majority of mosses, ferns, horsetail and club mosses. Large groups of flowering plants and insects live in or are in some way associated with the forest ecosystem. Many valuable natural sites and monuments, under legal protection today, are located in areas administered by the State Forests.

In compliance with the Forest Act 1991 and the “State policy on forests”, the State Forests keeps an inventory of all forms of nature protection, which is regularly updated with the data provided by forest districts in their “Programmes for nature protection”. These programmes, which since 1998 have been an obligatory component of the forest management plans for each forest district, are the basis of the systemic support for nature protection and for increasing biological diversity in the State Forests.

At the end of 2011 the State Forests’ inventory included the following, legally protected, forms:

- 1,255 nature reserves covering 124 thousand hectares, over half of which are forest reserves (696 reserves, 61.7 thousand hectares)

- 11,498 natural monuments, including:
 - 8,831 single trees
 - 1,551 groups of trees
 - 182 tree avenues
 - 476 erratic boulders
 - 226 rocks and caves
 - 232 area monuments



Summer training before winter collection of spruce cones in the selected seed stand in Zapowiedź, in the Wisła forest district (K.F.)



The Forestry Museum at the Forest Culture Centre in Gołuchów (P.F.)

- 9,262 areas of ecological utility covering 29,485 hectares
- 370 documentation sites, total area of 1,630 hectares
- 130 nature and landscape complexes, total area of 46,837 hectares.

Additionally, in the State Forests there are 3,091 protective zones around habitats of protected species of fauna and flora, with the total area of almost 150 thousand hectares. The largest zone of all-year

protection, over 32 thousand hectares in total, has been created for birds.

Concern about genetic continuity, sustainability of species and maintenance of biological diversity of forests prompted the State Forests to establish selected seed stands, which today cover an area of more than 15.7 thousand hectares. There are also 192.5 thousand hectares of economic seed stands and 4.2 thousand hectares of plantations and gene conservation stands, the latter created to promote the native ecotypes



The population of red deer in Poland increased 2.7 times in 1980-2011 and currently numbers about 195 thousand (C.K.)

of forest forming species. These resources supply the high quality forest reproductive material, also to clients outside the State Forests. Since the mid-1990s the valuable and diverse genetic material in the form of seeds and plant parts has been deposited in the Kostrzyca Forest Gene Bank.

At the turn of the last century the State Forests initiated a number of actions aimed at preserving biological diversity and restitution of threatened species of flora and fauna. Among them were: "Programme to preserve forest gene resources", "Programme to restore fir in Western Sudetes", Programme to restore yew", "Programme to reintroduce Capercaillie (grouse)" or "Programme to reintroduce lynx". Alongside these projects operate centres for the rehabilitation of animals (nine at the end of 2011). It is also worth mentioning that of the 33 botanical gardens in Poland, five are administered by forest districts and the sixth, an arboretum, is managed by the Centre of Forest Culture in Gołuchów, which is part of the State Forests.

The wealth of the forest fauna in Poland can also be seen in one of the highest in Europe populations of game animals.

In the years 1980-2011 the population of elk increased 1.7 times, deer 2.7 times, roe deer almost doubled and wild boar 3.5 times. Unfortunately, at the same time the numbers of animals inhabiting fields and forest borders have substantially decreased, eg. hare 2.5 times and partridge 2.7 times. The State Forests, therefore, has undertaken a breeding programme of hare and partridge in order to release the animals in to the wild in specific regions.

we are in the Union

WE ARE IN THE UNION

On joining the European Union on 1 May 2004, Poland was obliged to adopt the Natura 2000 programme and two EU directives: 92/43/EEC on the conservation of natural habitats and of wild fauna and

flora (known as the habitats directive) and 79/409/EEC on the conservation of wild birds (known as the birds directive). These regulations were incorporated into the Polish law by the Protection of Nature Act 2004.



A part of Natura 2000 area in the Jarocin forest district, known as the "Dębno" spot (K.F.)



Restoration of marsh lands in the Strzałowo forest district in the Masuria region (K.F.)

For the Polish foresters the requirements of the Natura 2000 programme were not unfamiliar. The Forest Act 1991 stated that the subject of forestry is not only a forest stand but also the entire forest ecosystem. The Act also required that all forest districts must include nature protection as an integral part of their forest management plans. Many internal regulations in force within the State Forests, such as those concerning reconciling and optimising all forest functions or support and protection of biological diversity, were already in the spirit of the EU's policy. However, one question remained, which was how the Natura 2000 network would affect the Polish model of forest management and specifically the production of timber on which the effective functioning of the State Forests depended.

There are two categories of protected areas which form the European network Natura 2000 in Poland:

Special Protection Areas for birds (SPA) and Sites of Community Importance (SCI) for protection of habitats and species of flora and fauna.

By the end of 2011 there were 144 protection areas for birds (SPA) with the total area of 5.6 million hectares and 823 habitats sites (SCI) with the total area of almost 3.8 million hectares. Both categories account for almost 20% of the total land area of Poland. The corresponding figures for the State Forests are: 124 SPAs covering 2.2 million hectares (31.2 % of the total area) and 662 SCIs covering 1.6 million hectares (22.9%); both categories account for 40% of the total area under its administration. The large share of protected areas meant that the foresters had to adopt a different set of forest management rules and take additional responsibility for the condition of protected sites. They also had to accept that their competences would be shared with the newly created office of the General Directorate for Environmental Protection (appointed under the Act of 3 October 2008 on the provision of information about the environment and its protection, public participation in environmental protection and environmental impact assessments).

Poland's membership of the EU opened access to additional funding. In 2006 a new organisational unit, subordinate to the Director-General of the State Forests, was established under the name Centre for Co-ordination of Environmental Projects, whose main purpose was to obtain and distribute EU funding for environmental projects. The Centre acts as the implementing authority for the EU supported operational programme "Infrastructure and Environment 2007-2013". The State Forests has already benefited from three significant, on-going, projects within this programme.

The first project concerns enhancing water storage capacity and prevention of drought and flooding in lowland forests and was commissioned in 2007.

The project involves 178 forest districts and its total cost will amount to PLN 197 million, of which PLN 136 million will be subsidised by the EU Cohesion Fund. When completed, the project will deliver 3,300 small storage facilities with a combined capacity for storing 31 million m³ of water.

The scope of the second project is “Counteracting the effects of rainwater outflow in mountain regions; increasing retention and maintaining streams and associated infrastructure in good condition”. It involves 55 forest districts in the mountain regions of southern Poland and on completion it will deliver 3,500 facilities allowing storage of about 1.3 million m³ of water. The total cost of the project is PLN 172 million, of which

PLN 119 million will be refunded by the EU Cohesion Fund.

The aim of the third project, “Rehabilitation of post-military training grounds managed by the State Forests for environmental purposes”, involving 55 forest districts, is to restore 24 thousand hectares of land degraded by military activities. The total cost is PLN 161 million, of which PLN 110 is to be refunded by the Cohesion Fund.

In 2000 the Directorate-General of the State Forests began work on two projects within the information campaign “Aware of hazards”, which aimed to raise public awareness of the danger of forest fires. These projects were partly financed by the EU Life+ programme.

getting to know the forest

GETTING TO KNOW THE FOREST

In the 1990s, the State Forests began to place more emphasis on nature and forest education and on promoting multifunctional, sustainable forest management based on ecological principles. As part of

this policy, the first promotional forest complexes were established in the mid-1990s.

The term “promotional forest complex” appeared for the first time in the decision of the Minister for



A stop along an educational trail in the promotional forest complex “Lasy Warszawskie” (“Warsaw Forests”) in the Chojnów forest district (K.F.)



Promotional forest complexes

the Environment, Natural Resources and Forestry of 8 November 1994 concerning protection and management of the Białowieża Primeval Forest. This decision referred to the resolutions of the Ministerial Conference on the Protection of Forests in Europe held in Strasburg in 1990 and later in Helsinki in 1993, when a definition of sustainable forest management (SFM) was formed.

Promotional forest complexes (PFCs) are based on an original idea of promoting all aspects of forests, including natural, productive and social, with a particular emphasis on accessibility of forests and on forest and nature education of society, especially of the younger generation.

Promotional forest complexes (PFCs) are defined, large and dense areas of forest whose aim is to promote the environmental policy of the state. They have been selected to represent different regions and therefore different habitats, species composition of stands, natural characteristics and forest functions. They usually cover an entire forest district although some stretch across more than one forest district. Some PFCs also incorporate forests owned by municipalities, research institutions or experimental stations belonging to universities.

Educational programmes run by the PFCs are not only aimed at general public. The PFCs also

engage foresters by promoting new technologies and new ideas of managing forests, as well as by spreading scientific knowledge originating from the experimental and research stations attached to them.

Between December 1994 when the first seven PFCs were established (including the “Białowieża Primeval Forest” PFC) and the end of 2011, 25 such sites have been created. They cover a total area of 1.21 million hectares, of which 1.19 million hectares are under the management of the State Forests (16.7% of the total area administered by the State Forests).

Promotional forest complexes have opened centres for environmental education, created educational trails and information points, “green schools”, parks and dendrology gardens, which are visited by more than 750 thousand people every year. In fact, all organisational units of the State Forests engage in promoting knowledge about forests. Since the beginning of 2004 all forest districts have been delivering educational programmes and they are now an integral part of their operations. Over 2 million people took part in various events organised by foresters across the country to celebrate the UN sponsored International Year of Forests in 2011.

the future

THE FUTURE

In the mid-1990s the Polish economy was undergoing transformation from the socialist model to the free market economy model. Many state owned industries and enterprises were privatised and the idea to privatise or commercialise the state-owned forests also appeared on the agenda. The State Forests, as one of the few remaining large state-owned enterprises which were doing well in the new economic reality, was an attractive candidate for privatisation, promising a substantial injection of cash for the treasury. At the time the state budget deficit was growing and the government held (on 18 February 1996) two referenda, one on universal enfranchisement of citizens and the other on the use of state property, all of which motivated the privatisation debate.

There followed various attempts to privatise the State Forests. One proposal for legislation on reprivatisation of the state property included establishment of an incorporated company to replace the State Forests, whose shares would be used as compensation to the owners who lost their forests in nationalisation of private land after the Second World War. Another approach was a bill on reprivatisation and compensation for lost property, presented to the parliament on 20 September 1999, which included a proposal that the State Forests would buy, using the Forest Fund, bonds from the owners who would have obtained them as compensation for the property they lost after the war. The proposed bill was eventually passed after 18 months of parliamentary debates.

However, the President refused to sanction this law on the grounds of cost to the country's economy.

At the same time as the successive proposals for privatisation were being debated, there was a growing public dissent which was channelled through the Legislative Initiative Committee, a form of direct democracy allowing citizens to exert influence on the government. Having collected over 200 thousand signatures on a petition, the Committee brought about a bill on "preserving the national character of the country's strategic natural resources". The bill was



After the first reading of the citizens' bill "on preserving the national character of the country's strategic natural resources", 17 November 1999. Jan Podmaski with the Speaker Maciej Płażyński (KSPL archive)



Spruce and pine forest in the Tuchola forest district (K.F.)

successfully passed and made in to Act on 6 July 2001. It was the first case of citizens' initiative resulting in legislation in the Republic of Poland.

This, however, was not the end of the privatisation threat. At the end of 2004 another bill concerning the right for compensation for property confiscated by the state after the war was introduced. This time it was proposed to levy a 5% tax on income of some state-owned enterprises, including the State Forests,

in order to meet the compensation demands from people whose property the state confiscated. For the State Forests the tax was estimated to amount to PLN 200 million per year, which would be devastating to the organisation, as the Directorate-General stated in an official ccommuniqué in January 2005. The foresters expressed their concern that the law, if passed, would open the doors to a change of status of the State Forests as an organisation and to its gradual disintegration,

which will threaten the environment and ecological security of the country. The proposal was eventually abandoned mainly because an agreement on a formula for levels of compensation could not be reached.

On 9 December 2008 yet another proposed bill “On compensation for property lost during the nationalisation of 1944-1962” was put forward. This time financial compensation for victims was proposed and in order to meet the cost a special fund would be created, which would draw from, among other sources, funds associated with forests. The proposal was immediately opposed, not only by foresters but also by other groups, mainly on the grounds that the final sum of claims for compensation was not known and therefore the amount of levy imposed on the State Forests could not be defined. Some assessments put it at PLN 570 million per year, which over the 15 years of the law being in force would amount to a sum of PLN 8.5 billion. Jan Podmaski, who was active in the Legislative Initiative Committee in 2001, in a letter to the Prime Minister Donald Tusk quoted

PLN 750 million per year as a likely figure. Just for comparison: the State Forests’ income in 2007 was PLN 808 million and expenses were PLN 681 million. The proposed levy would therefore leave the State Forests with practically no money.

In the autumn of 2010 the Minister of Finance proposed to include the State Forests in the public finance sector, which would make it possible for the state to use the forest funds to reduce the budget deficit. For the State Forests that would spell the end of its independence and self-financing status, and as a consequence the loss of funds for supporting any non-productive forest functions. Once again the foresters opposed the latest proposal. Supported by the unions and the representatives of the movement “Defence of Polish forests”, they organised a protest outside the Parliament and a petition which was signed by 207 thousand citizens opposing the proposed legislation.

At risk in these deliberations is the future welfare of our forests.

The State Forests National Forest Holding administers over 7.27 million hectares of forest land (all figures are for the end of 2011). This is almost 77.5% of all forest land in Poland (9.35 million hectares) and almost a quarter of the country’s total area. To recap: in 1919, at the beginning of the independent Republic of Poland, the state managed only 1.24 million

hectares of forests. In 1923, when the first statistics on forests became available, the forest cover in Poland was 23.1%, only to decrease to 20.8% after the Second World War. Almost a hundred years later, the forest cover reached 29.2%. This is the measure of success of the State Forests as an organisation and of several generations of dedicated foresters*.

