

THE FOREST

A GOOD NEIGHBOURHOOD



State Forests
Poland



Photo: Maciej Szpiech

THE FOREST

A GOOD NEIGHBOURHOOD

HUMAN HISTORY BEGAN IN THE FOREST. THE WOODLANDS WERE ONCE OUR HOME: FEEDING, PROTECTING, AND GIVING US EVERYTHING WE NEEDED TO LIVE. And they are still important today. Forests cover almost one-third of Poland and are a national treasure that we all share. Their growth and management are looked after by foresters working for the State Forests National Forest Holding (the State Forests).

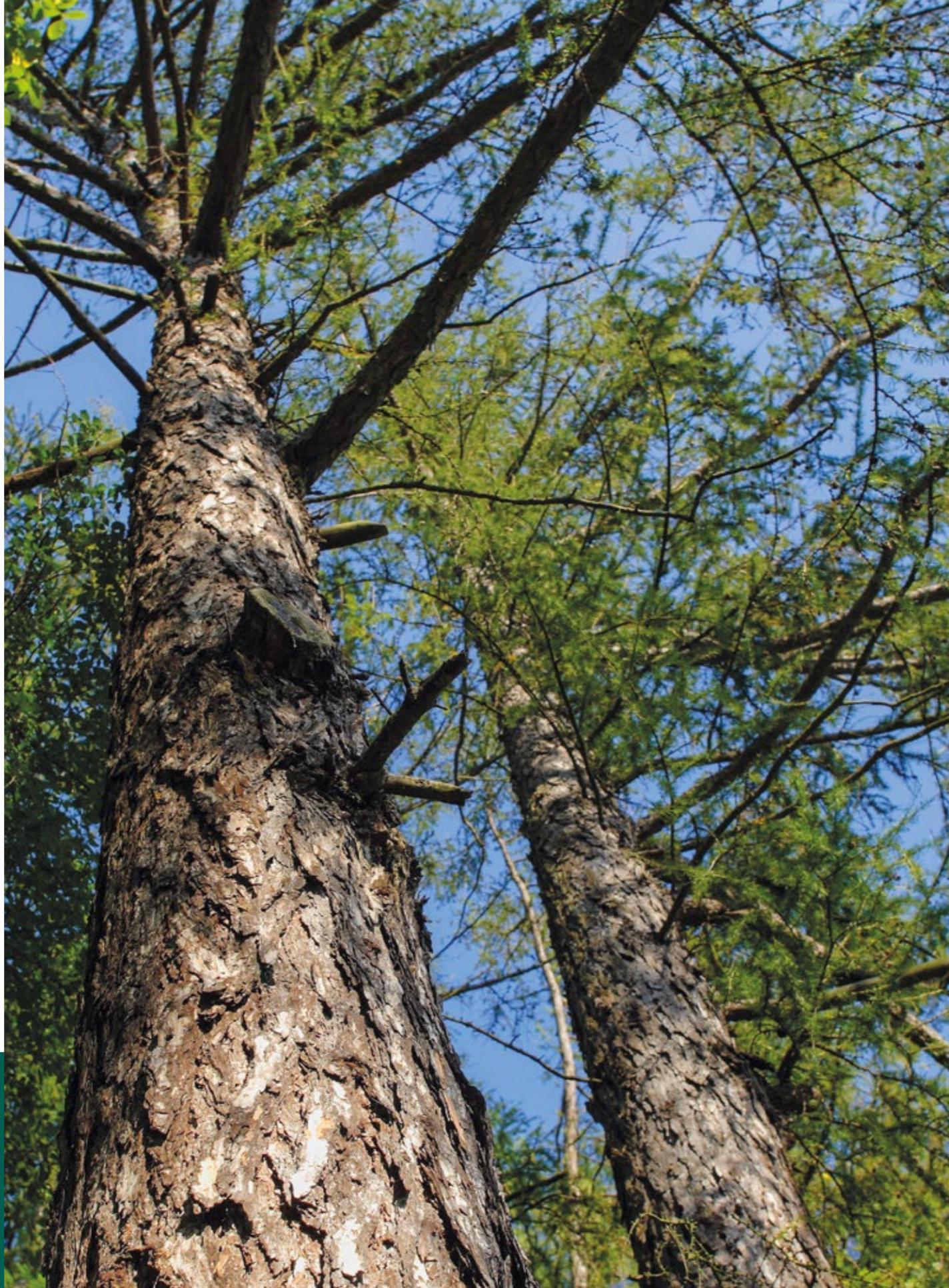
Polish forests are the clean air you breathe, the nature that surrounds you, and the wood that you use. They are a place where you can relax, gain strength and inspiration, or simply pick mushrooms and wild strawberries.

Polish forests provide employment to thousands of people: foresters, timber industry employees, health-food producers, fruit and mushroom pickers, carpenters – and enable those people to earn a living.

Because forests store water and make the climate milder, they help farmers and people who work in recreation and tourism.

The State Forests makes sure that forests are used and managed in a sustainable way. This means that the forests will stay as they are and will always be accessible to everyone in Poland.

Thanks to the work of foresters, the amount of forested land in Poland is increasing. In 1945, forests covered **21%** of the country, and today they cover almost **30%**. The plan is that by 2050, **33%** of Poland will be forested.



COMFORT FROM NATURE

Forests protect the global climate everywhere on the planet as well as the local one where we live. This means that life on earth is exceptionally diverse, and when we neighbour a forest we can enjoy the best of it. This is something only nature can give.

FORESTS PROTECT PEOPLE WHO LIVE NEARBY FROM EXTREME CONDITIONS: THEY OFFER RELIEF DURING A HEATWAVE, reduce wind speed, and regulate humidity. Forests work like air conditioning, but without its damaging side effects. They do not need a power supply and their work does not cost us anything.

Forests protect against noise, which is one of the worst threats to the modern world. We get used to it and often forget about it. But it does its damage without us knowing. It attacks

the nervous system and makes us feel tired and stressed all the time. **A belt of forest 250 m wide reduces car noise by around 66%.** Without it, we would have to be 2 km away from the road to get the same result.

Forest air contains 70 times fewer disease-causing organisms than city air. This is because trees give off phytoncides, which are active airborne substances that kill bacteria and slow the growth of microorganisms.



In summer, **ONE ADULT TREE** can give off up to 450 litres of water every day through the surface of its leaves. It would take **five big air-conditioning systems** working for 20 hours every day and reducing the temperature of the surroundings by 3–7°C to get the same result.

Relaxing in the forest can mean a short, afternoon stroll or a longer stay. Beautifully located holiday centres, guest rooms, and hunters' lodges make people want to visit at all times of the year. This is because forests offer peace and quiet and fresh air every day. State Forests properties offer **the perfect environment for a relaxing break.**



Photo: Międzyzdroje Forest District archive



Photo: Józef Siczka

OXYGEN FACTORY

Forests produce the oxygen we need to live, and absorb carbon dioxide. They also clear the air of harmful dusts and pollution.

CARS AND COAL-BURNING STOVES, WHICH PUT TOO MUCH CARBON DIOXIDE INTO THE ATMOSPHERE, ARE A BIG PROBLEM IN CITIES. Forest complexes help to solve this problem. As they grow taller and thicker, trees produce timber. They absorb carbon dioxide from the atmosphere at the same time. **Absorption of CO₂ is one of the remarkable qualities of forests. To support this process, the State Forests has launched a programme to create forest carbon farms.** It is working with scientists to find natural ways to increase the absorption of carbon dioxide by forest complexes.

Working like perfect filters, **forests clean and regenerate the air. This prevents smog from forming and weakens its effects.** It is worth remembering this when planning even a short break, especially as no one in Poland is more than an hour away from a forest.

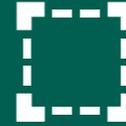
Forests produce much more oxygen than land covered by other types of vegetation.



Photo: Shutterstock/Monkey Business Images

 **ONE HECTARE OF FOREST** produces enough oxygen for 5,000 people.

 Forest air contains **TWO-THOUSAND TIMES FEWER** harmful substances (dusts, gases) than city air.

 It takes **ONE HECTARE OF FOREST** to absorb all the carbon dioxide produced in one year by three people doing everyday household tasks.

WATER STORE

A forest acts like a sponge, absorbing and storing water which it later releases gradually. It is an amazing reservoir of a precious resource that we do not have enough of in today's world. A forest not only holds water, but also cleans it. Thanks to this, the water is of the very highest quality.

FOREST COMPLEXES CIRCULATE WATER BOTH LOCALLY AND ALL OVER THE GLOBE. Forests protect nearby areas from the effects of water shortage, which can lead to the formation of deserts and steppes, and from the effects of water excess, which can lead to flooding.

Foresters recognise the importance of forests for protecting water resources. To aid this natural ability of forests to store water, they run small-scale water retention programmes. Man-made reservoirs, valves, and dams to reduce water flow, ensure that water is always available wherever people or nature need it. But foresters do more to keep water in the forest than just build reservoirs. They also plant the correct tree species, make sure that the forests have multi-storey stands, and leave dead wood in them.

Shelterbelts and field copses reduce wind speed and prevent water loss. With their protection, evaporation from fields is 20–25% lower than from fields without them. This is of great benefit to farmers.



Photo: Kamila Kapeta

Photo: Karol Janćzuk



Photo: CKPŚ archive



Photo: Lech Jędras

If a forest retains water, the land around it is **less likely to suffer from drought and floods** than land that does not neighbour a forest.



Photo: Przemysław Barszcz

FORESTS PROTECT SOIL FROM EROSION. In forested mountain areas, erosion is two-hundred times lower than in fields growing winter crops and as much as seventy-thousand times lower than in fields growing root plants.

FOREST RICHES

The diversity of life in the forests that grow around us is more than just spring birdsong outside our windows and the fragrance of budding plants. Every forest tree is a little universe in itself.



Photo: Robert Antosz

The impressive natural riches of the forests provide **perfect conditions for watching and studying plants and animals** in their natural environment. This is popular with both scientists and amateur forest-lovers, while nature tourism is a new and fast-growing branch of the economy.



Photo: Shutterstock/Bildagentur Zoonar GmbH

OVER 3 MILLION HA OF FOREST ON LAND MANAGED BY THE STATE FORESTS – 38% OF THE TOTAL AREA – BELONGS TO THE EUROPEAN NATURA 2000 NETWORK, whose aim is to protect the most valuable species and natural habitats. There are more than 2.2 million ha (29.1%) of Special Protection Areas for birds, and almost 1.7 million ha (21.8%) that are occupied by Sites of Community Importance. Foresters do not only protect nature and support biological diversity in areas that are home to

Natura 2000 sites, nature reserves or ecological sites. They do this in all forest areas for which they are responsible. They run many of their own programmes and participate in others. Foresters have helped increase the woodgrouse population in the Carpathian Mountains, protect osprey and black grouse, increase the number of fir and yew trees, and reintroduce the lynx, dormouse, and bison. The area covered by older tree stands and the amount of fallen dead trees in the forests is increasing. This also enhances their natural riches.

You can follow everything the State Forests does to protect nature by joining us on Facebook – each forest district has its own profile. You can also do this by watching the Echa Lešne TV channel on YouTube.

Foresters also support the national parks. The money for this comes from the forest fund and is used for active nature conservation, fire prevention, and for building and maintaining the education and tourist infrastructure.



Photo: Shutterstock/Welcomia

PROTECTION ZONES These zones are a good way of protecting forest animals that are rare or in danger of extinction. The black stork is a good example. Protection zones around their nests give them the peace and safety they need to reproduce and rear their young. So far, the State Forests has opened nearly 3,500 protection zones.

65% OF WILD SPECIES of animals and plants live in forests.

Large areas of the State Forests are under various forms of nature conservation. There are **1,281 NATURE RESERVES**, almost **11,000 NATURAL MONUMENTS**, and nearly **9,000 ECOLOGICAL SITES**. More than half of the total area of landscape parks and protected landscape areas is in the State Forests.



Photo: Marta Baranowska

GREEN LEARNING

Forests are like well-equipped classrooms: with the help of foresters, we can learn a lot about nature and forest management from them. Two million adults and children use the 6,500 educational facilities every year.

Foresters try to participate in local initiatives. They organize competitions and nature exhibitions, and also take part in various open-air events, including festivals, markets, and educational picnics.

QUALIFIED AND EXPERIENCED FOREST EDUCATORS CAN OFFER MANY WAYS OF LEARNING ABOUT THE FOREST. The classes and activities can take place either outside in the forest or indoors in the forest education classrooms. The well-equipped educational facilities **allow classes to be run all year round** – regardless of the weather – and specially-designed trails offer learning combined with fun. Many of the facilities are adapted for people with disabilities, including wheelchair users. Classes are booked in advance, and their subject and time are agreed with the forest educator in the given forest district. The offer usually covers all age groups: from pre-school to post-primary. **The classes are free of charge.**

Classes are also held in schools, cultural centres, museums, and municipal offices. At the invitation of teachers, foresters give a total of more than 5,000 talks every year about the forest and their work.



Photo: Tadeusz Chrzanowski



Photo: Tadeusz Chrzanowski

Are you a nature lover? Do you want to know more about the work of foresters? You'll find all of the important information here: www.lasy.gov.pl. The up-to-date local news is posted **on the websites of the Forest Districts and on their Facebook pages**. There is also a very popular educational site for adults, children, pupils and teachers: www.erys.pl



Foresters use the following resources when running lessons and activities: more than **1,000** educational trails, almost **300** forest education classrooms, **65** forest education centres, **OVER A HUNDRED** tree parks.

THE FOREST WELCOMES YOU



Photo: Shutterstock/Val Thoerner

More than 80% of Polish forests belongs to the nation as a whole. At a time when the global trend is to build fences and keep people out, this is remarkable. The foresters employed by the State Forests are there to protect this shared resource. They care for the forest and welcome everyone who wants to visit.

The State Forests National Forest Holding manages 7.6 million ha of forest. This includes:

- **4,000 KM** of cycle paths;
- **600** forest camping sites;
- **4,500** places in overnight accommodation;
- **7,000 KM** of horse trails;
- **22,000 KM** of paths for runners and walkers, which is about half the length of the equator;
- **400** campfire sites;
- **3,160** forest car parks.



Photo: Paweł Fabjański



Photo: Shutterstock/Jacek Chabraszewski

DO YOU WANT TO RUN, EXERCISE, AND CYCLE? AND IN THE WINTER GO CROSS-COUNTRY SKIING? OR JUST GO FOR A WALK? In the clear forest air, with its unforgettable fragrance, any way you choose to relax is healthy. Instead of smog and noise, there are hiking and cycle trails, bridle paths, and – a real luxury in a world of ‘No parking’ signs and too many cars – forest car parks.

Time spent in the forest is a valuable present we can give to ourselves.

Foresters and local organisations welcome you to take part in sporting events. The biggest of these is the national **I Run Because I Like Forests** event. The best-known local events include Leśna Piątka [Forest Five] in the Karnieszewice Forest District, Bieg Rzeźnika [Butcher’s Run] in the Bieszczady Mountains, Bieg Katorżnika [Convict’s Run] in the Lubliniec Forest District, and Leśna Zadyszka [Breathless in the Forest Run] in Ciechanów. There is also plenty on offer for thrill-seekers. More than 20 km of natural, single-track, one-way cycle trails marked out in the mountain terrain are waiting for you in the Świeradów Forest District. All cyclists are welcome.

Sometimes we see signs like ‘Tree Felling and Logging. No Entry’ or ‘Fire Hazard’ in and around the forest. For our own safety and for the good of the forests, we must not ignore these signs. In special circumstances, when it is not safe, forest district managers can restrict entry into the forest. This is usually because of chemical spraying, natural disasters, or a risk of fire.

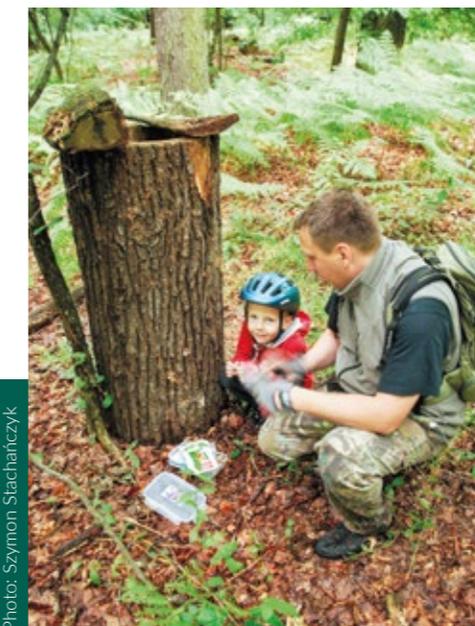


Photo: Szymon Stacharczyk

It is well worth combining a family trip to the forest with geocaching – an outdoor game that involves looking for ‘treasure’ hidden by other players. **Many State Forests facilities offer geocaching as a recreational activity.**

THE PERFECT RAW MATERIAL

Beautiful but practical, flexible but durable, friendly to us and the environment, always available, and with a wide range of uses: timber is the perfect raw material.

FOREST MANAGEMENT MEANS NOT TAKING MORE TIMBER FROM THE FORESTS THAN THEY CAN PRODUCE. In this way, the amount of timber in the forest store increases steadily. What is more, timber is taken from the forest in accordance with its natural cycle, thus helping it to grow. Timber from land managed by the State Forests is produced in an environmentally friendly way and is certified as being of the highest quality.

The majority of houses in Poland are built using cement, the production of which is, unfortunately, a major source of carbon dioxide emissions. **An alternative could be the use of timber, which 'stores' the carbon from the carbon dioxide that trees absorb by photosynthesis, thus reducing the effects of climate change.** Timber is friendly and easy to work with. Timber products also decompose naturally and quickly. Timber houses hold heat very well and are able to 'breathe' They also regulate humidity, which means that they maintain a microclimate that is pleasant for the people who live inside them. They are much quicker to build than houses based on other materials, and the building process is largely independent of the weather.



Photo: Robert Antosz



Photo: Krzysztof Plak

Photo: Shutterstock/Pincasso



Photo: Shutterstock/Vaver

Paper, books, wooden picture frames, flooring, furniture, and even entire houses and other structures: timber can be used in so many ways and is so common that a piece of the forest is always present in our lives.

Do you dream of living in a timber house on the edge of a forest? **The State Forests has started a programme called *Polish Wooden Houses: Live in Harmony with Nature*.** The programme will promote innovative technologies that use timber and also encourage the development of systemic solutions that support the wider application of timber-based technology.



Thanks to sustainable management, **Polish forests can supply all the timber we need**, and the State Forests are a guarantee that we will always have enough.

THE ENERGY OF THE FUTURE

The energy in the trunks, roots, branches, and leaves of trees is the energy of the future. It can light cities, power factories and vehicles, or simply heat homes.

FORESTS ARE POWERED BY THE SUN. RADIANT ENERGY TRAPPED BY TREE LEAVES IS USED IN PHOTOSYNTHESIS. This produces the nutrients trees use to grow. The solar energy stays in the forest. It is clean and produced to the highest standards of environmental protection.

Human beings can use the energy contained in trees. **This includes every part of the forest biomass: trunks, branches, bark, sawdust . . .** When wood burns it releases carbon dioxide into the air, which contains carbon that has been trapped inside it for decades. However, carbon is part of a constant cycle. It is absorbed by trees (hand-planted by foresters in most cases) that grow in the same places where earlier trees have been removed. In this way the cycle is completed, energy resources are reproduced, and the environment benefits from new generations of trees. Just like the forest, it is amazing and never fails.

Using a fireplace is a good way of keeping your home warm. It should burn efficiently and thus conserve energy. Then it causes very little air pollution. **Dry, seasoned wood is also needed. You can buy it in your nearest forest district,** where you can also get advice about which species to choose.



Photo: Shutterstock/Bondvít



Photo: Shutterstock/Ygor



Photo: Shutterstock/MNStudio

We can get our Christmas trees directly from foresters. When a tree comes straight from the producer, we can be sure that it has been freshly cut, is from a legal source, and is sold at a fair price. Christmas trees are **usually grown in special plantations.** New trees, which release oxygen and absorb carbon dioxide as they grow, are planted to replace the ones that are cut down.

Forests, which are powered by solar energy, absorb carbon dioxide and produce timber.



Photo: Ewa Pastorek



Photo: Paweł Fabijański



Photo: Paweł Fabijański



Photo: Wojciech Mędrzak

TO YOUR HEALTH!

True strength comes from natural things. Nearby forests are full of fruit, herbs, and flowers that have a positive effect on our health and our mood.

BILBERRIES are good for eyesight and sharpen vision after dark. This is why RAF pilots valued them so much during World War II. There is a tradition of exporting bilberries to Great Britain.

BEAR'S GARLIC is an early-spring leaf that makes us more resistant to illness and protects us from infections. It tastes almost exactly the same as ordinary garlic, but it does not have the same pungent smell.

COWBERRIES have special taste qualities. They are the base for Cumberland sauce, a favourite of kings, and are used by all the best chefs.

THE FASHION FOR UNUSUAL DIETS MEANS THAT WE ARE EATING MORE AND MORE EXOTIC items such as goji berries, green coffee, chia seeds, and açai berries. But in our forests, we can find plants with just as many valuable ingredients, and everything is 'produced' naturally and ecologically. They include bear's garlic, bilberries, elderberries, sea-buckthorns, barberries, rosehips, cranberries, and many others.

Collecting fruit, mushrooms, and other good things that the forests provide is a great way to get healthy food. It is also an important branch of the economy. In regions with many forests, it provides a substantial income. **The State Forests runs a programme promoting healthy food from Polish forests. It supports the picking and gathering forest products and their processing by local people.** It also helps organise the infrastructure needed to distribute those products.

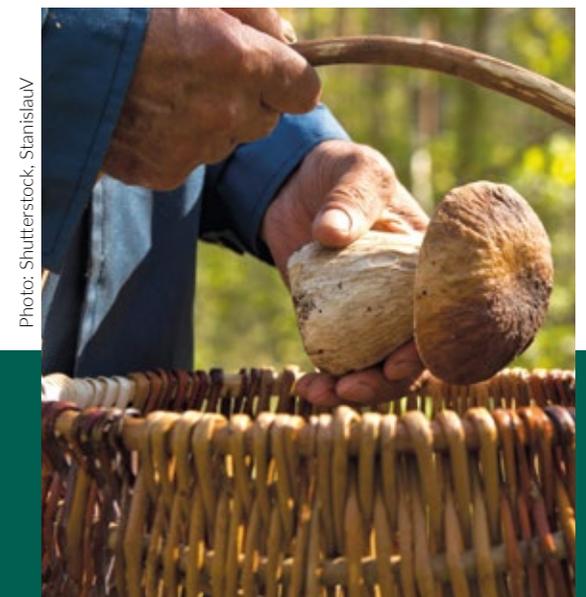


Photo: Shutterstock, Stanisław



BIRCH JUICE has five times more magnesium, four times more potassium, three times more zinc, and eight times more calcium than maple syrup imported from North America.



GAME MEAT is worth noting. Its advantages include B vitamins, potassium, phosphorus, zinc, magnesium, iron, and lots of easily-digested protein. It contains fewer calories than meat from farm-bred animals.



THE BLACK ELDER is rich in anthocyanins, which cause cells to age more slowly, regulate the metabolism, and strengthen the immune system. The flowers help the body to sweat, while the fruit eases pain and has a detoxifying effect.

LOCAL AND NATIONAL

The forest economy run by the State Forests National Forest Holding is an important part of Poland's national economy. Because it is sustainable and multi-functional, it can serve different needs without destroying the environment.

FORESTERS ARE ALWAYS WORKING TO IMPROVE THE CONDITION OF THE FORESTS. EVERY YEAR THE FORESTS GET BIGGER, which means there is more timber, new forests are planted, and there is a wider variety of species in the stands. This makes the forests stronger, healthier, and more biologically diverse.

The State Forests covers the cost of managing the forests it looks after. It is a self-financing organisation. Instead of being a burden on the taxpayer, it actually contributes significant funds to the state budget, apart from maintaining and increasing the wealth of the forests.

The State Forests works on a national level but is also involved in local activities. **Municipalities and forest districts have worked together on almost 1,500 projects in the last ten years.** In 2017 alone, the State Forests has spent nearly PLN 100 million from the forest fund and about PLN 20 million from the forest districts' own funds on building local roads, cycle paths, education centres, and recreational facilities open to all. **Foresters have also worked with local government to obtain and invest European Union funds.**

Photo: Michał Ogrodowczyk



Photo: Andrzej Stoiński

The State Forests meets almost all of the needs of the Polish timber industry. **The raw material taken from the forests every year is the right amount to allow timber companies to expand without damaging the environment.** Almost all of the timber is sold through Internet auctions. This gives everyone equal access to the raw material. **The State Forests IT system is designed to allow buyers to decide for themselves how to make the**

best buys without having to pay extra for transport.

The State Forests follows the latest scientific advances and introduces them into its everyday work. The needs of the State Forests National Forest Holding also stimulate the work of universities and research institutes.

The State Forests pays for forest management itself while increasing the value of our shared asset and contributing funds to the state budget.

EMPLOYMENT FOR THOUSANDS

In the countryside in particular, the State Forests is one of Poland's largest employers. And the presence of the forests helps to create new jobs, including jobs that are not with the State Forests National Forest Holding.

THE CLOSENESS OF THE FOREST AND OF STATE FORESTS FACILITIES IS A CHANCE TO GET AN ATTRACTIVE JOB OR TO START YOUR OWN BUSINESS. The timber and furniture industries, forest services companies, firms that manufacture and service forestry machines and equipment, timber-trading companies, local carpentry shops, and agrotourism farms all offer jobs that are connected with acquiring and processing timber, and regenerating the forest. Picking fruit, gathering mushrooms and herbs, and producing healthy food are all sources of income directly connected with the forest. The forest is also the workplace of researchers, photographers, and journalists. **It is estimated that the State Forests provides a living for several hundred thousand people and their families.** The timber industry alone provides employment for more than 300,000 workers. This is especially important in the countryside, where there are no large industrial plants or towns that could offer other forms of employment.



Photo: Grzegorz Gaczyński



Photo: Paweł Fabijański



Photo: Arkadiusz Mańczyk



Photo: Marta Baranowska



Photo: Grzegorz Dworakowski



Photo: Shutterstock/Sculpies



Photo: Paweł Fabijański



Photo: Paweł Fabijański

Only 25,000 of the **375,000 jobs** that depend on forest management are with the State Forests.

New development programmes run by the State Forests, such as **Polish Wooden Houses: Live in Harmony with Nature** and **Healthy Food from Polish Forests** are helping to provide jobs in local areas.

THE PERSON IN THE GREEN UNIFORM

The State Forests has been looking after Polish forests for almost one hundred years. The way today's foresters approach and understand the forest is therefore a traditional one. It is about knowledge, love, and commitment that go beyond the everyday responsibilities of the job. Foresters work for the forests, which means that when they look after their health and condition, and ensure that we have all the timber we need, they are working for all of us.

THE GUIDING PRINCIPLE OF FOREST MANAGEMENT IS SUSTAINABLE DEVELOPMENT. THIS GUARANTEES THAT THE NATURAL functions of the forests are preserved and also balances the needs of nature, society, and production. New technologies and the continuing modernisation of Polish forestry make it possible to operate effectively and at the highest level. But people and the forest always come first.

Working for the good of the forests means being at their service twenty-four hours a day. This is why, apart from being professional, foresters need to be passionate about the work they do. These are the qualities that foresters have, and thanks to their enthusiasm and commitment they have earned the full trust of the public.

Being the person in the green uniform often means more than doing the everyday tasks that a job requires. **Foresters also work for the**



Photo: Piotr Król



Photo: Łukasz Gwiżdziel

benefit of the environment around them and take an active interest in the lives of their local communities. Many of them are elected to serve in local government. By sitting on the councils of municipalities, districts, and towns, they have an active influence on the growth and development of their local areas. Others take a deep interest in the history hidden in the forests. They discover and look after places of remembrance. There are also many foresters who give their time to help people in need.

All owners of private forests can turn to the forest districts for help in planning the management, maintenance, and protection of their forests.



Photo: Paweł Grądzki



Photo: Katarzyna Mędrzak

It's good to have **the forest and foresters** as our neighbours!

Living near to a State Forests facility gives a feeling of safety and security. It means that in the event of a fire, flood or hurricane **we always have someone we can go to for help.**



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