Forests: Real all-rounders

Nature sculpted by foresters
Dear Readers,

Our forests perform a variety of services for us. They are an excellent climate change mitigator: managing our forests sustainably and using wood products - both play an important part in reducing greenhouse gas emissions and achieving the Federal Government’s ambitious climate change mitigation goals. At the same time, our forests are home to many protected animals and plants. They also offer work and income to many people, in particular in rural regions. And over 55 million people visit forests at least once a year for rest and recuperation and to experience nature. Put simply, our forests are true all-round talents.

Our forestry sector conserves and develops our forests by using and managing them sustainably. The sector ensures that the forests continue to be able to provide their many services to society. And the Federal Government’s forestry policy ensures there is a good balance between the ecological, economic and social demands that we make of our forests.

Discover the all-round talents of our forests! Enjoy this brochure!

With very best wishes,

**Christian Schmidt, Member of the Bundestag**
**Federal Minister of Food and Agriculture**
WHAT ARE THE BENEFITS OF FORESTS AND THE FORESTRY SECTOR IN GERMANY?

Cross your heart!
Are you aware of what forests and the forestry sector do for you and for your quality of life?

In this booklet we invite you to discover the wide variety of benefits provided by our forests.

Protection, use, recreation: our forests are all-rounders

If you want to learn more about forests and the forestry sector in Germany, please go to:
→ www.waldkulturerbe.de and
→ www.bmel.de

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COME IN!

Who likes to climb over rough and smooth surfaces? Strollers and hikers appreciate our forest tracks. Throughout the country, more than 574,000 kilometres of forest tracks are open to visitors.

Our forests sit pretty: They cover a third of the territory of Germany, i.e. 11.4 million hectares.

WHEN YOU VISIT A FOREST YOUR HOSTS ARE THE FOREST OWNERS

Did you know that most of our forests are held by private owners? Just under half of our forest area (48 percent) is covered by privately owned forests; the overwhelming majority being small (average forest size per forest holder: approx. 2.5 ha).

Around a third of all woodlands are government-owned (federal and state governments). 19 percent of the woodland area is covered by communal forests (mainly forests owned by towns and municipalities).

More information (in German) on forests and the forestry sector can be found in the BMEL booklet “Unser Wald – Natur aus Försterhand”, and ordered or downloaded from → www.bmel.de as well as → www.waldkulturerbe.de
One in three children in Germany has never seen a native wild animal outside captivity although this would easily be possible when visiting a forest. The combination of physical activity, sensory impressions and nature experience turns a forest visit into a special adventure.

“Experiencing nature in forests enhances a child’s development”
THIS IS WHERE THE WOOD GROWS

The forestry sector produces the sustainable raw material wood. Every year, around 122 million cubic metres of wood grows in our forests. If you visualise this quantity as cubes with an edge length of one metre which are laid down beside each other, the result would be a 122,000 kilometre-long line - the length of three times the circumference of the earth.

The wood from our forests is produced sparingly and sustainably. In Germany some 76 million cubic metres of wood are harvested every year.

Whether as building material, basic material for paper or energy carrier - today wood and wood-based products are still an omnipresent part of our lives!

INHALING GOOD HEALTH

Forest air is something special: It is enriched with the scents of the trees, including many essential oils. They strengthen the immune system and help to reduce stress. In addition to that, the forest air has particularly low dust levels.
FOREST MANAGEMENT IS CLIMATE MANAGEMENT

Forests are the most important climate stewards in our country and an important carbon sink: Trees and the forest soil contain large carbon quantities.

Sustainable forest management and timber use make an active contribution to climate protection in multiple ways:

- The trees are solar-driven wood producers. Wood harvesting creates space and light for new trees in the forest. They grow and sequester CO$_2$ in the process.

- Timber contains 50% carbon and is an effective carbon reservoir. It is fixed in wood and wood-based products over many years in a climate-compatible way.

- Wood can replace more energy-intensive raw materials such as metal and plastic material and fossil fuels. This way scarce resources are spared, less CO$_2$ is released and there is less strain on the environment.

The most important measure against climate change is to reduce the emission of greenhouse gases.

Our forests and the sustainable use of timber take some 127 tons of CO$_2$ out of the atmosphere every year, which amounts to 14% of the total German greenhouse gas emissions.
Every year forests in Germany produce some 25 to 38 million tons of oxygen. This is approximately between one and one-and-a-half times the amount of oxygen all German inhabitants need to breathe in a year. Every human needs some 300 kilogrammes of oxygen per year to breathe.

In the forests it is cool, the air is moister, the trees protect from wind, the crown canopy from solar radiation. The forest is a natural air conditioner.

Forest soil is an ideal water reservoir. The humus cover and mineral soil are interspersed with innumerable fine tunnels, cavities and pores. The forest soil soaks up the water like a sponge and only releases it with a delay. The superferranean water discharge is delayed, the emergence of floods is prevented. In this way forests protect our dwellings effectively from floods.

One hectare of forest soil can store and retain up to three million litres of water.
Calling, knocking and rustling sounds can be heard everywhere.

Our forest is home to some 140 vertebrates, 6,500 insect species and many other micro-organisms. In addition to that, 76 tree species, 116 shrub species, 1,020 herbaceous plant species, 676 moss species and 1,024 lichen species as well as innumerable fungi grow in forests.

Our managed forests are among the most natural forms of land use in Germany.
The sale of wood preserves the forest: Nationwide the sale of timber generates around four billion Euros per year for forest enterprises, which accounts for 78 percent of the total earnings. This way, timber sales finance sustainable forest management as well as the protection and recreational benefits of forests.

Timber production serves the public interest:

It is the resource base for jobs and added value in rural areas.

Forests and forest management are as important as ever in Germany.

In Germany, forests are protected by sustainable forest utilisation.

By law, our forests are protected by forest acts of the Federal and the state (Länder) governments. They protect our forests from over-use, over-exploitation and surface loss and oblige forest owners to manage forests properly and sustainably and to reforest clear-cut woodlands.

Sustainability is the key concept for the forestry sector and forest policies.

Knowledgeable forest owners, trained forestry personnel and our society protect forests because they appreciate forests and their benefits.
The groundwater under a forest is particularly clean, rich in oxygen and ideally suited for the abstraction of drinking water.

This is why very frequently forests are part of water protection zones: More than 40 percent of the surface of German water protection zones are located in forests. Some 2.1 million hectares of forests are drinking water protection areas.

A large proportion of our drinking water comes from forests: As early on in the process as at humus level coarse impurities are filtered out. Water infiltrates several soil layers into the forest soil. Trees, fungi and innumerable micro-organisms absorb the nutrients available in the water and induce a biological purification.

At the same time, there are chemical interactions between humus, soil minerals and seepage water. Thus the seepage water in the forest soil is processed intensively before it reaches the groundwater.

Our sustainable forestry supports the purification of water in the forest soil:

In forests no fertilizer is applied, pesticides are only used in exceptional situations on small surfaces, and there is no wastewater in forestry.
PEACE AND QUIET

From an acoustic point of view, forests provide a unique ambience. When the wind is soft, the rustling of the leaves in the forest at 20 decibels is even quieter than the ticking of an alarm clock. Therefore it is easy for us to find tranquillity and relaxation in forests.

Visit at your own risk!

Anyone may enter forests for recreational purposes, albeit at one’s own risk. Barriers, e.g. due to forest works or forest fire danger, are there to protect forest visitors!

A HABITAT FOR WOODPECKERS AND FRIENDS

Numerous animal and plant species rely on special structural elements. Nationwide some 93 million habitat trees and 224 million cubic metres of deadwood provide special habitats for feeding and breeding, largely also in commercial forests.

Deadwood and habitat trees provide “stepping stones” and networking elements so that the dwellers of old trees and deadwood also find enough food and living space in production forests.
WOOD: PART OF OUR EVERYDAY LIVES

Wood based products impact our lives. We use wood on a daily basis. But who thinks of forests while using paper towels or toilet paper?

For Germany wood is a particularly important domestic raw material, since

→ wood is a raw material that can be used for a wide range of purposes and has special technological properties;

→ with sustainable forest management, wood is re-growing in an environmentally sound and durable manner;

→ Wood can replace finite and climate-damaging fossil resources and

→ in connection with modern technology forests and wood facilitate an almost waste-free closed substance cycle.

Timber harvesting boosts the quality of life!
USING FORESTS SUSTAINABLY

Sustainability does not necessarily come about by itself, it must be desired and targeted. This involves competent forest owners, skilled forestry personnel and a society which appreciates forests and their benefits.

Forest sustainability in Germany has many aspects, for instance

- Forest laws and forestry authorities which make sure that forests can develop in a vibrant and sustainable manner,
- Forestry training and research organisations,
- Advisory and further education services for forest owners,
- Forest research, forest inventories and environmental monitoring of forests.

**Sustainability is a utilisation concept meaning that resources are used in a way that they do not suffer any lasting harm and that they are equally available to future generations.** Forest sustainability includes all services and functions of forests.

In Germany some 1.1 million workers depend either directly or indirectly on forests for their living, for instance forest workers, timber traders, carpenters, joiners, paper manufacturers or printers. They work in approx. 128,000 companies and generate sales of around 180 billion Euros per year.
MORE INFORMATION ABOUT FORESTS AND THE FORESTRY SECTOR IN GERMANY

You can order this and other publications free of charge

Please visit the website → www.waldkulturerbe.de to find the ordering portal for the forest material published by the Federal Ministry of Food and Agriculture as well as more information about forests and the forestry sector in Germany.
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