

THE MANY FACES OF WOOD

Photographs by Marcin Kmiecinski

We talk to **Hubert Lachowicz** from the Institute of Forestry Sciences at the Warsaw University of Life Sciences about his fascination with wood and its tactility, as well as the material's practical applications in manufacturing.



Ship's wheel from an unknown sailing ship, made of different types of wood, including oak



Top quality Italian spruce wood used to make soundboards for string instruments

Hubert Lachowicz, PhD, DSc

is an Associate Professor at the Institute of Forestry Sciences at the Warsaw University of Life Sciences (SGGW).

He studies the properties of wood grown in different environmental conditions and works on identifying the species of archeological and ethnographic wood specimens. He also specializes in teaching how to identify defects in lumber.

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*"Behold, the tables – carved all of yew
behold, the pews – carved all of oak."*

An excerpt from one of the oldest preserved Polish folk songs, which used to be sung after wedding feasts to give thanks. Dating back to pagan times, this song is just one of many testaments to our ancient fascination with and admiration for beautiful wood.

Fig. 1
A specimen
of archeological
wood – a "black
oak" floorboard
from a house
in Elbląg;
first half of
the thirteenth
century
(reclaimed wood)



Fig. 2
Archeological wood – "black
oak" construction elements
from 1346, excavated in the
Old Town in Gdańsk

Fig. 3
Examples of different colors
of oak. Right to left: original
color, "black oak" found
in a swamp, and "brown
oak" colored by a fungus.
In the background, sample
of foundations found
in Elbląg; first half of
the thirteenth century



Where does your fascination with trees and wood stem from (so to speak)?

HUBERT LACHOWICZ: My interest dates back to when I was a student at the Faculty of Forestry at the Warsaw University of Life Sciences. I was inspired at classes on wood as a material – when I was handling wood and learning about its properties, characteristics, and applications. I continued learning more about the theory and practice of woodworking, and my fascination turned into a kind of obsession. I love studying wood and surrounding myself with objects made of it, both historic and contemporary – I simply feel good when I'm in the presence of wood.

What makes it so special?

Wood has unique properties, and we can think about them through the lens of its myriad applications and uses. The special properties of different types of wood manifest as different texture, density, durability, color, scent, etc. My absolute favorite is how tactile it is – I derive great pleasure from handling wood.

How many items are there in your collection?

To be honest I can't really say – I've never counted them. I guess there are hundreds, including wood from all continents and many historic items. I prefer to look at wood in terms of its applications rather than particular species.



Fig. 4
“Behold, the tables
– carved all of yew...”
This 200-year-old yew shows
clear marks of hinges
and an axe slash. Centuries
ago, the material was
used in carpentry
and furniture-making

Fig. 5
Contemporary turned
yew-wood bowls

Fig. 6
Oak foundation sill, dating
back to 1237 (the year
of felling) – around the time
of Elbląg’s foundation

Fig. 7
“Brown oak” (reddish-brown
parts of the cross-section)
– the color results from the
early stages of heartwood
decomposition resulting
from beefsteak fungus
(*Fistulina hepatica*), which
ultimately causes wood rot.
“Brown oak” is considered
a valuable material, in that it
imitates old wood

What’s the most unusual use of wood you’ve come across?

Someone built a wooden nanosatellite, and it’s now up there orbiting the Earth, 500 km above the surface! It’s a cube measuring 10 cm per side and weighing about a kilo. It’s made of ordinary birch plywood coated with aluminum oxide.

What’s the most special item in your collection?

Honestly, I think they are all interesting. For example, I have a reconstruction of a bow made of yew wood, found at Wawel Hill in the 1950s. Yew was a prized material for making bows and weapons in general, starting in the Middle Ages, and its widespread use

caused the species to become endangered. In fact, was the first species to become protected in Poland, under the statute of Warta in 1423. In the past, yew wood had myriad applications in daily life – it was used to make drinking vessels, combs, barrels for storing milk and pegs for attaching roof tiles and sealing coffins. Chronicles report that, in parts of present-day Western Ukraine, yew blocks were actually used to pay rents during the seventeenth and eighteenth centuries, with an estimated hundreds of thousands of yew trees being felled for the purpose! This goes to show the great value of yew as a material, but its special properties and beautiful appearance ultimately led to the species being decimated. At the Royal

Castle in Warsaw, visitors can admire the historic yew paneling in the bedroom of King Stanisław August Poniatowski; the door to the chamber is also made of the same material.

What perspective on wood does being a forest ranger give you?

That's a good question, and one worth exploring in depth elsewhere. The most important issue is ensuring that woodlands are stable, and that they are maintained such that they can provide timber for future generations. Everything starts in the forest, so forest rangers use their extensive knowledge to cultivate, protect, and utilize forests to obtain wood, which is then used to make everyday and artistic objects. After felling, trees make their way to major processing plants and onwards to factories and workshops of various sizes, where the timber is turned into furni-

ture and other paraphernalia. As consumers, we get to enjoy using wooden objects, from flooring and furniture to kitchen utensils and children's toys. I think it's important that children have plenty of opportunities to handle wood, especially in today's world filled with plastic and electronics.

Tell us something about archaeological wood.

What methods do you use to study it?

My archaeological research focuses on specimens of archeological wood excavated in the Old Town of the city of Elbląg in northern Poland. The studies date back to the 1980s, and they are the first to use dendrochronology to determine the age of oak structures. So far, over 500 samples of archeological wood have been studied to determine the age of the trees, frequently even including the precise year when they were felled. This helps us understand how the city developed and

Fig. 8

Scarring on a trunk of a Scots pine, marking cuts made to obtain resin in the Rogów Forestry. Above, a pinewood construction element from the Ethnographic Park in Tokarnia



Fig. 9

The queen of the Polish forests: a radial section of a 200-year-old pine (large twist of fibers not shown)

Fig. 10

A bow made of yew – a highly effective medieval weapon made of the finest wood



grew. The wooden foundations in the photos date back to 1237 – the exact time when Elbląg was first founded. During the period, thick oak blocks were used as foundations to protect the buildings against the damp soil. The soil’s high moisture content led to the creation of anaerobic conditions which protected the wood from decomposition. Additionally, oak foundations which have spent centuries in moist soil change color to black, mainly on the outer edges. The inner wood is dark brown. Oak that spends a long time immersed in fresh water, such as rivers or lakes, usually changes color throughout. The resulting material is known as “black oak” or bogwood; its unique color is the result of tannins dissolved in acidic water interacting with the wood, especially heartwood. The reaction occurs over the course of centuries or even millennia, giving the wood a beautiful uniform black tint. The unique, valuable material was once used to

make solid wood furniture, parquetry and marquetry, such as seventeenth-century Polish furniture made in the Subcarpathian Region, resembling Viennese furnishings. In Elbląg, we are also excavating mediaeval latrines, finding well-preserved everyday objects such as plates, bowls and children’s toys such as spinning tops.

We began our conversation with the question about your personal fascination with wood – can we close it by saying that wood is your passion?

Wood is my entire life. It’s difficult to describe how I feel when I think about and work with wood – it’s a whole different plane which can’t be understood unless someone shares this passion.

INTERVIEW BY MARCIN PIETRAS, PhD



Fig. 11
Historic ski pole made
of hazelwood, early
twentieth century

Fig. 12
Ashwood skis from the 1920s
(Sweden)

Fig. 13
Pail carved out of a single
pine trunk, possibly used for
storing grain (first half of the
twentieth century)