



**The Splendour of the White Elm**  
**A Tree of Hope**



The white elm, *Ulmus laevis*, is a little known tree species of central and eastern Europe, the French call it "Un arbre méconnu", A Forgotten Tree.

Why is that so? Because it is a rare tree species? Whose habitats have disappeared? It has no relevance in the timber industry, and it has never played a role in the breeding of resistant elms. Field elm was always more demanding and more interesting for dendrologists.

Yet, white elm is a tree of hope.

Under natural conditions, white elm is a secondary species of the lowland floodplain forests. In the German system of plant communities these forests are called oak – field elm – hardwood – forests. With field elm mostly gone due to DED, white elm takes over and fills the ecological niche which was formerly occupied by field elm.

A prominent feature of white elm is its resistance to DED. We have seen vast areas in the Elbe floodplain in which field elm were either doomed or dead. In the same place white elm has held up well. We still don't

know for sure what the decisive factor is; it may be something in the bark.

If we want to have a sizeable population of elms in the floodplains of Northwest Saxony in the future, it will have to consist mainly of white elm. The City of Leipzig / Forestry Department will not forget field elm or wych elm or its hybrid, the Dutch elm. But the mainstay will be white elm.

Last year there were reports from England that white elms in a test field showed symptoms of DED. This is not altogether surprising. As far as we know white elm was never declared to be immune, just resistant. If the infection pressure is high enough, white elm will catch DED. But we also see the ability of the trees to overcome the disease. The reports should not prevent us from working with white elm. And frankly, as far as open landscapes and natural woodland ecosystems are concerned, there is no alternative.

It is our tree of hope.



Along the Elbe river you find white elm in abundance; in some parts of the floodplain it is the dominant tree species. Therefore, we call these places "elmscapes." Every larger tree in this picture, taken near Torgau in Saxony, is a white elm.





Come early spring, the white elm bursts into flower – later than the wych elm or the field elm. Come late spring, the fruits are ripe and ready for harvest. Later in the year, the nursery sends back the seedlings they have raised.



Under the management of the Landscape Stewardship Council white elms were planted in the Elbe floodplain near Torgau. However, heavy floods washed them away in great numbers. These are replacement trees.





Two generations of white elm near Torgau: The trees open up their crowns when they grow older (on the left hand side). The two younger trees are vigorously conquering their place in the circle of life.



There are good reasons to assume that this is the biggest white elm in the Leipzig region with a DBH of 152 cm. However, it consists of four stems – as can be seen overleaf (top left).





Talking of stems and trunks – let's talk about buttress roots. It is often said that they are typical for white elm and for white elm only. But you can also see them in hornbeam, limetree and poplar. The picture shows a white elm (top right).



In the northeastern parts of Germany white elm was a favourite roadside tree. Only few are left, (falling victim to road improvements rather than DED. This is highway B6 near Dresden.





This is a very rare type of habitat along North Sea coasts: The freshwater mud flat. In Hamburg it is protected as a nature reserve called "Heuckenlock". You see Erik, a visitor from the Netherlands, examining the tree.



Here we see white elms in the "Alte Elbe Kathewitz" nature reserve in the Elbe floodplain. The river marks the border between rare and scattered occurrences in the West and a continuous population of white elm reaching as far East as the Ural Mountains.





In the deep woods: Two fine white elms in the "Burgaue" nature reserve in Leipzig. The Forestry Department manages 1200 ha of protected woodland. To the right you see forester Martin mapping big trees (112 cm BHD in this case).



Parts of the original Leipzig floodplain were swallowed by the growing city, some were turned into parks and other recreational areas. This white elm guards the Johanna Park very close to the city centre of Leipzig (127cm BHD).





## Epilogue

My name is Gordon. For many years I was a nature conservation officer for the Saxon state government. However, my last employer before retirement was the City of Leipzig / Forestry Department.

My work with elms dates back to my dissertation studies a long, long time ago. Besides my regular jobs, I always worked with elms and elm people. Today, I act as a sort of consultant for the Forestry Department as a volunteer.

With my elm work I have always been in touch with The Conservation Foundation, London. Over the last two years I had the interesting task to answer questions from the general public in context with the CF's Great British Elm Search program.

### Publications (German only)

- Eine neue Methode zur Bestimmung der mitteleuropäischen Ulmen, 2021, Books on Demand
- Handbuch der Ulmengewächse, Version 2.7.1., 2022, <https://www.ulmen-handbuch.de>

### Pictures

Cover: Springtime in Muskauer Park, close to the border with Poland. This page, top: White elms near Eilenburg, Saxony. This page, right: The Hufeisenulme ("Horseshoe Elm") in Daubitz, Saxony.

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