

Past, Present and Future of Hooke Park, the Architectural Association's (Un)usual Forest

*Location: Beaminster, Dorset, UK
by Zachary Mollica and Christopher Sadd*



Image © Raza Kazim

A view of the AA's forest campus from above. The site's buildings are found at the centre of Hooke Park's 350 acres

Zachary Mollica is Hooke Park's Warden. He arrived in 2014 as a student of the MArch Design + Make programme and has since 2018 led the AA's operations in Dorset.

Christopher Sadd is Hooke Park's Head Forester. He has managed the school's forest for 30 years and has provided the raw materials for each project you will find on the site.

In 2002 the Architectural Association School of Architecture (the AA), a design school found within a line of Georgian townhomes on London's Bedford Square, took on a bold new venture, acquiring a 350-acre forest in Dorset to establish a second home. As grounds of an ancient woodland and host to an earlier design college, Hooke Park is an unusual site which since the early 1980s has fostered a productive collaboration between forest management and design practices. A growing educational campus is located at its centre; there's no place quite like it.

Hooke Park is home to the AA's MArch/MSc Design + Make programme and hosts short residential workshops



Image © Valerie Bennett

The Wood Chip Barn's robotically fabricated 'tree fork truss' is made of 20 distinct beech forks. Through digital design and fabrication tools the inherent form and structural capacity of the tree is employed directly. Completed 2016

for visiting students throughout the year. Collectively, the site's woodland, innovative buildings and expert staff create a unique educational environment for students who have the good fortune to spend time here. Away from the city, exploring design at the point of physical production, Hooke Park students are tasked with developing alternative ways of making buildings with trees. They are supported by a diverse team which includes foresters, engineers, artists, roboticists, scientists, amongst others.

Hooke Park first appears in the Domesday Book (1086). From there until the mid-20th century, it was used variously as a common, a deer hunting enclosure and held as an investment. In 1949 the Forestry Commission acquired the forest in addition to 90 acres of rough grazing adjoining. To help fuel post-war rebuilding efforts, they set about the progressive felling and replanting of most of Hooke Park's forest between 1951-60. Except a few areas of Alder carr and the odd Oak stem, native species were replaced with those predicted to be of greater value, including Beech, Norway Spruce, Douglas Fir, Western Red Cedar and more. These were planted in mono-specied compartments which due to minimal thinning taking place until the 1980s, suffered from overcrowding.

In 1982 the Parnham Trust, a nearby educational institution led by furniture designer John Makepeace, acquired Hooke Park and set about building a new campus in the woods. Three buildings developed in this period by teams including ABK Architects, Frei Otto, Edward Cullinan and Buro Happold deployed long slender Spruce poles within their structures – each taking advantage of the tree's great strength along its grain. It was the Trust's vision to source the material for these buildings by thinning the forest compartments around them, and to this end, they appointed Andrew Poore as their Head Forester to set a course of management. Despite their rough finish, these buildings were far ahead of their time: a visceral commentary on the common disconnect between design concept, construction method and material source.

When the AA took on Hooke Park in 2002 it inherited 350 acres of forest, three extraordinary buildings (one each to eat, sleep and work in) and a few staff members who remain central to activities today. It also inherited an ethos demonstrated by the campus' first buildings – adding value to low-value products of the forest through design. In 2010 Martin Self, then Director of Hooke Park founded the Design + Make postgraduate programme



Designed by Richard Burton of ABK and Frei Otto, with the engineers Buro Happold, Hooke Park's main workshop is an impressive long-span enclosure built using low-value material from the surrounding forest. Completed 1989

whose students have since been responsible for extending the campus through ambitious design-build projects generously funded by the Wakeford Bequest.

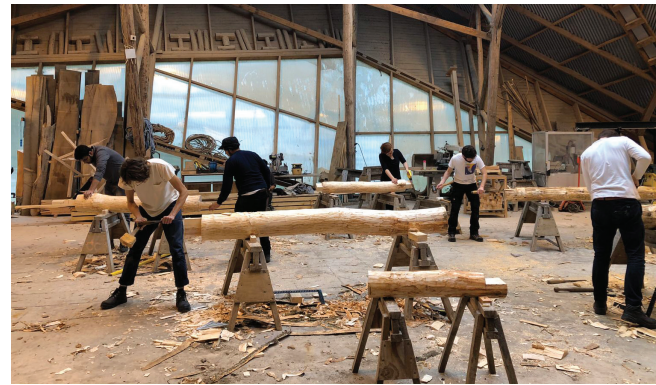
Introducing new digital methods to an old material, the programme has produced a series of provocative buildings whose strategies, if applied at scale, might enable a greater diversity of forest products to be applied within buildings with minimal processing. In recent years Design + Make has become well known for deploying bent, forked and otherwise non-straight timbers through the combined forces of digital 3D scanning and a 6-axis robotic arm.

The last 30 years have seen a transformation of Hooke Park's forest structure, targeting the less stable crops through felling and restocking with mixed species. Thinning of the broadleaf dominated stands remains an annual operation following the forest's current Woodland Management Plan. These and other forestry processes fit well into the Design + Make curriculum, enabling students to consider the material of timber firsthand. Further links between theory and practice are made through lectures on forestry and also in understanding and participating in practical skills such as high pruning and planting.

At the end of 2019, the AA launched a new research unit known as the Wood Lab, with funding from John Makepeace. In its first year, the lab is working towards a long-overdue publication which will tell the full story



Students in Hooke Park are not only taught to use traditional tools. They are also taught to instruct complex digital machinery, and even to make their own as needed



Analog fabrication

of 30+ years experimenting with trees, while casting an eye forward to build the case for increased use of native forest products. Trees are the source of essential building materials for the future in the face of an imminent climate emergency. Too often the relationship between foresters and those who will use their products has been a disconnected one (requiring a degree of crystal ball gazing). Work in Hooke Park points to the exciting potential outcomes of a collaborative relationship between those producing and those using trees – resilient woodlands and extraordinary buildings made from their products.

The spaces we occupy influence us considerably. Through an unnerving 2020, Hooke Park's unique resources have enabled our students to continue their work in person; to stay on the tools. Beyond any project, Hooke Park's most impactful product will be motivated individuals, who, having learned from many professions, will leave the forest's boundary equipped to take on the urgent issues ahead.

Follow our antics on **Instagram @hookepark**. For more information on the AA please visit **aaschool.ac.uk**

BOOK REVIEW

'The man who made things out of trees' by Robert Penn Penguin

Review by Alex Mowat



There is a dedicated section on my bookshelf for four special books; books so cherished that I try and read them at least once a year. One of them is Jean Giono's classic tale: "The man who planted trees".

When I saw that Penguin had published the book called "The man who made things out of trees" I was slightly annoyed. It seemed to tread on the toes of my favourite classic. I shunned buying the book in deference to my old favourite.

Subsequently I learned that the book involves Woodland Heritage's sawmill at Whitney on Wye; I succumbed and bought a copy. Curiosity got the better of me.

"The man who made things out of trees" describes Robert Penn's two-year journey of discovery with the timber from a single Herefordshire Ash tree, milled at Whitney Sawmills, and describes what he learned along the way.

"I decided the best way to learn more about the Ash tree was to fell one. Once the idea had germinated in my mind it grew quickly. I would find a tree in a wood close to my home. It would be milled by my local sawmill. The best timber would be distributed to artisans and makers to be converted into artefacts and products. There will be chopping boards, bowls, wooden wheels, spatulas, arrow shafts, catapults, tent pegs, coat racks, coracles, and a paddle. I can even smoke food with the sawdust. The brash and some of the

branches would be left behind on the woodland floor to slowly rot away and eventually returned to the earth. Every part of my Ash tree will be used: a zero-waste policy would fence the project - to exalt the worth of a single tree. How many uses could I get from one tree, I wondered - ten, twenty, thirty or more?"

He explains many practical techniques of using Ash: how to dry the timber, how to harness Ash's elasticity and how different parts of the tree suit different things. Many of the objects employ traditional techniques and traditional knowledge. Highlights include wheelwrighting, steam-bending toboggans, and the technique of using a pole lathe that dates back from the Middle Ages. He explains that the skin of dogfish was an early form of sandpaper.

Not all the book is nostalgic and traditional, however. He visits experimental Ash bicycle makers in southern Ireland and the makers of CNC machined Premium baseball bats in Kentucky.

There is a deeper theme throughout the book; I suspect one close to the hearts of many Woodland Heritage members. He describes the deep psychological benefits of cutting wood, carving wood, splitting wood, and creating wooden items. He is eloquent about a subject that is very difficult to describe: how wooden things bring you close to nature. Why we feel that they grow better with use and age. How they hold the spirit of both the maker

and the original tree. He balances the pleasure a tree gives while growing and the excitement at the prospect of what it might be converted into once it has been felled.

He is honest, open, and personal about how the project of turning one Ash tree into as many things as possible brought him personal psychological benefit.

"Throughout my adult life I have suffered from mild depression. It comes in bouts, often arriving when I don't expect it. I'm not saying that the only way to keep the "black dog" off my back is to spend time among trees. I'm merely observing that my personal experience has been good for my wellbeing. The whole project with this Ash tree has been positive ... having my cereal out of an Ash bowl, I'll take that over Prozac any day."

As a member of Woodland Heritage, I expect you will love this book as much as I have. You may know some of the characters in the story; there are several characteristically wise quotations from Will Bullough to name one WH connection.

"The man who made things out of trees" and the "The man who planted trees" now sit side by side on my shelf of books that I re-read at least once a year.

Go to your local bookstore, buy it, read it and whatever your experience of trees or timber you will find something revealing, insightful and new.