

Zero waste: Furnishing homes with recycled materials

By Ken Hickson

In my dream, a talented young lady designed a useful item of furniture — ideal for study, work or dining at home — and she exhibited it at the London Design Festival.

When I woke up, I recalled what she came up with and started to pull together the dreamy design. She had based it on the look and feel of a wooden school desk, which I was familiar with in my youth. But what she had designed and produced was also an all-in-one, practical table and seating unit, made as an easy-to-assemble kitset. There was a two-seater and a four-seater model. What made it special to me was that it was purposely made from discarded or second-hand wood, and any other recycled material she could lay her hands on.

Of course, this was all a figment of my fertile imagination, no doubt fostered by the fact that I have been doing a lot of reporting on and writing about timber, furniture and wood in architecture over the last couple of years. And admittedly I was also directly involved in a project, albeit virtually, at the same London Design Festival in September 2021.

It was probably also the result of being cooped up at home for months on end, turning my marble-topped coffee table into a work station, as well as platform for dozens of digital zoom conference calls. Forget about meal service!

So that got me thinking about furniture designers and artists, many of whom definitely show a preference for wood. Many are also leading the trend towards capitalising on what might otherwise go to waste. Call it recycling or repurposing — discarded pieces of wood and also bio waste and plastic are being put to good use.

Coming down to earth from designer dreamland, I came up with a few examples of this — some local and some from far away:

FINE FURNITURE FROM THE LOCAL TREE PROJECT

Roger&Sons started a Local Tree Project a few years back and now produces furniture and fittings in all shapes and sizes from discarded timber. They collect suitable logs from a local sawmill which come from trees

that had fallen or had to be cut down for good reason, and with Singapore's National Parks Board approval.

They call this “an ethical furniture initiative” as it salvages trees that have been felled for urban development. It rehabilitates these abandoned logs by turning them into durable, future-proof objects and furniture.

MAKING TABLES WITH UPCYCLED PLASTIC MILK BOTTLES

Kaia, now called Semula, came up with the idea to convert plastic waste into something to admire and use. The first ones I saw looked like small and colourful ceramic tiles.

Now they have expanded this and can produce larger objects, like a



*Muybridge Plover
by Australian artist
Dave Hickson*

coffee table top made using plastic upcycled empty milk bottles. It is incorporated into a table and stools by Roger&Sons, and featured at Foreword Coffee, an environmentally friendly coffee shop based in Singapore.

Sam Boolsambatra, director of Semula, explained: “Semula reimagines waste, such as plastic, and gives it new value to minimise the need to use valuable new resources. As change leaders, we look at problems affecting our environment and find simple, locally sourced innovative solutions for them.”

FROM PALM OIL WASTE TO PLYWOOD

Earlier this year, we heard about OPLY, a new material developed in Malaysia that uses oil palm biomass — or empty fruit bunch (EFB) — as a resource to make ‘wood from no wood’, to produce a direct replacement for conventional plywood.

As the palm oil industry produces an estimated 8 million tonnes of waste annually, this seems like a much better way to turn lignocellulose fibre from plants into something of material use for panels and furniture.

FIRE-RETARDANT COFFEE BIO-COMPOSITE MATERIAL

Working with Singapore's Nanyang Polytechnic School of Chemical and Life Sciences, A1 Environment created a fire-retardant material with over 50% of its mass in coffee grounds. This means that less raw material is used in the production, saving resources while making full use of a material that was previously only a waste stream.

This material can also be recovered, broken down and put back into the process of making new material, making this an infinitely recyclable material. How can it be used? For furniture, of course. A1 Environment's innovation was a recipient of the inaugural Food Resource Valorisation Awards given out by the National Environment Agency of Singapore in September 2021.

CREATING A HOME FOR NATURE AND WASTE WOOD

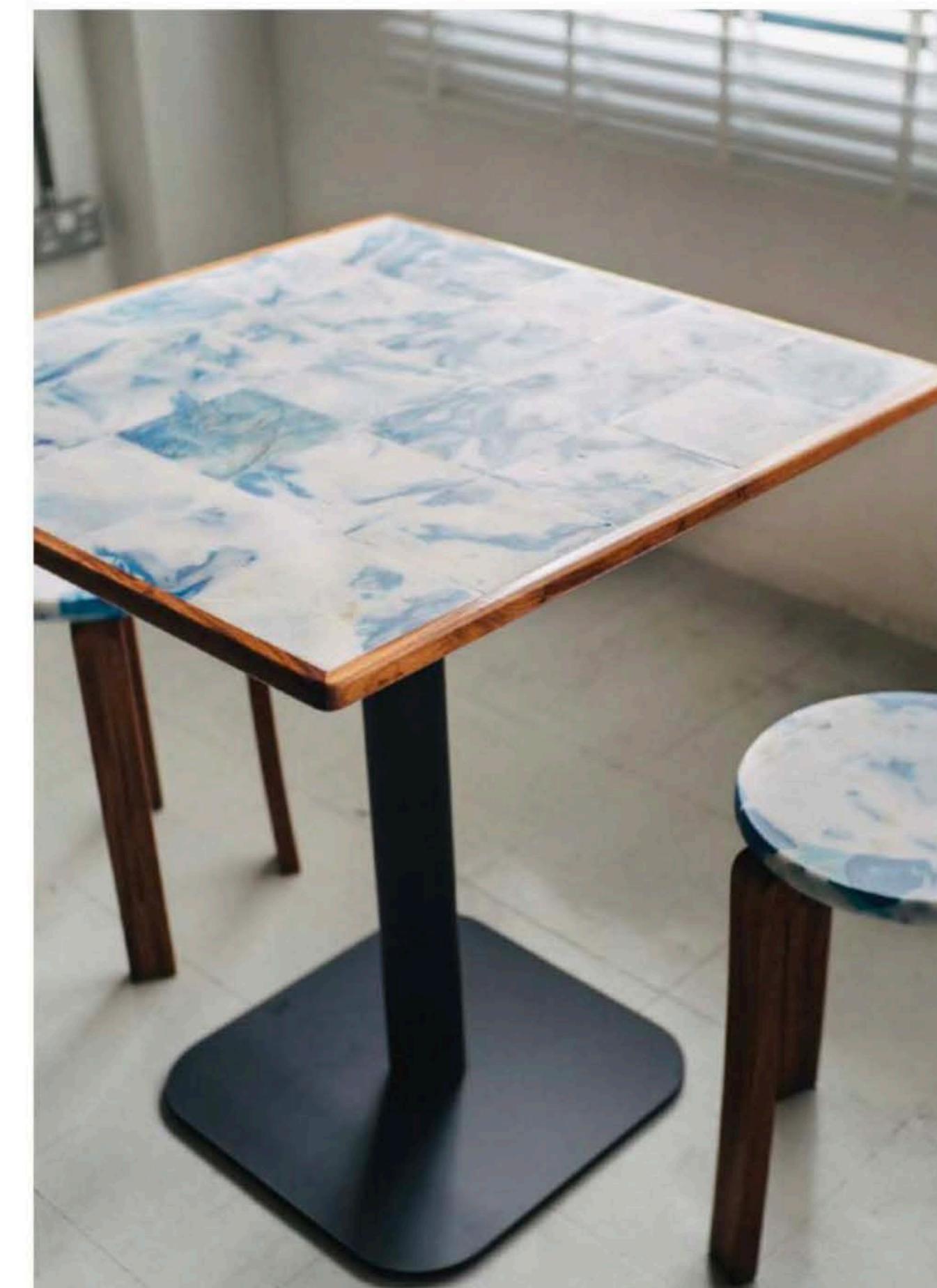
Art can become a finishing touch for a home, whether displayed on the wall or on table tops. When it utilises discarded wood and brings nature inside, that's even better.

One Australian artist I know, Dave Hickson, collects offcuts of western red cedar from a company that makes bee hives, or picks up pieces off the floor of a local furniture maker, and manages to turn them into “Art in Wood”. Many of his creative constructions in



*Right: OPLY made
in Malaysia from oil
palm biomass*

*Below: Coffee table
top made with
plastic upcycled
empty milk bottles
by Semula*



MATERIALS



Legend

- 1 Bowater desk by Jan Hendzel
- 2 Table by A1 Environment
- 3 Original items by The Table Guy
- 4 A vintage double desk by Smithers of Stamford in the UK

discarded wood from many sources. On their website, it states categorically that they “only work with salvaged wood or material from globally recognised green-certified timber mills, to support environmental best practices”.

The Table Guy specialises in solid wood furniture making or craft carpentry and bespoke product design accessible in Singapore, to create durable solid wood furniture “that is great for the environment and perfect” for their consumers.

THE ART OF WOOD CRAFTSMANSHIP

This all goes to prove that we are seeing trends in furniture making and buying: a preference for solid wood; and a desire to care for the environment and not see something of value go to waste, with a heavy emphasis on what we call “the art of wood craftsmanship”.

We saw this recently in many of the exhibits at the London Design Festival, as well as those previewed for the subsequent London Craft Week, most notably in the work of Jan Hendzel, who said that “finding green and sustainable ways of making has been central to the evolution of our practice. We have been creating furniture for a long time, and we will never stop improving our sustainability efforts.”


wood represent the birds he sees in his neighbourhood.

He described his latest construction, the Muiybridge’s Plover, as such: “The Plover sits for many weeks on a nest in open ground — squawking and bristling at any suspicion of danger. This one is delicately resting on a shape reminiscent of a Matisse cut-out, as this seemed to give the bird a sense of time passing, kind of like a Muiybridge time-lapse.”

WOOD FOR GOOD INITIATIVE FROM THE TABLE GUY

The Table Guy, a Singapore-based furniture maker, also draws on

So let’s end where we started around the “dream design” of a table or desk and chair set which serves multiple functions. In case you want to revert to the original all-in-one school desk, we found the ideal vintage item at Smithers of Stamford in the UK. This vintage double desk comes with a flip-up lid and plenty of storage space below. It is handmade from recycled teak wood too.

If your dream is to provide an ideal spot to give your children a place to study, and even for you to conduct work from home, maybe this is the answer. Unless you can find my mythical designer to come up with something better. 



BUILD SUSTAINABLY BUILD WITH WOOD

EVERY TWO MINUTES U.S. FORESTS GROW 700 CUBIC METERS ENOUGH TO BUILD A 12-STORY BUILDING

Learn more:
www.americansoftwoods.org

