

ADVENTURES

OUT OF  
■ THE ●  
WOODS

OF ■ TWELVE  
HARDWOOD  
CHAIRS

*Royal College  
of Art*

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## MESSAGES FROM THE FOREST

*David Venables*

For over 20 years the American Hardwood Export Council (AHEC) has been at the forefront of wood promotion in Europe, successfully building a distinctive and creative brand for U.S. hardwoods. Strong industry commitment and support from the USDA's Foreign Agricultural Service has enabled AHEC to research, educate, inform and change perceptions about hardwood sustainability and performance. The U.S. is blessed with arguably one of the largest and most diverse hardwood resources in the world, and while the public is right to be concerned about over exploitation of tropical forests, what is often overlooked is that hardwood forests in many temperate regions have been expanding rapidly. The U.S. has seen the volume of its hardwood forests more than double in 50 years, so there is a strong case for increased use. ■ The "Out of the Woods" experience is part of that strategy to share knowledge, and is one of our most exciting and rewarding projects to date. The talent amongst these students is astounding and the project has given them a unique opportunity to work with and explore the performance potential of U.S. hardwoods. Moreover, we have been able to share life cycle data with them and demonstrate, through science, the positive environmental profile U.S. hardwoods have. In producing detailed Life Cycle "cradle-to-grave" impact assessments for each chair we begin to develop a genuine understanding of the real and very direct

environmental impacts of design and material choices, an extremely relevant subject in today's sometimes indulgent world. The twelve finished hardwood chairs have inspired this amazing collection of short stories, poems and images that are both fun and thought provoking.

## INTRODUCTION

*Harry Richardson &*

*Sebastian Wrong*

In this book you will find many different stories – written, pictorial, fictional and factual – that combine to tell the adventures of twelve hardwood chairs. Drawn from different sources, these stories skip through time and space, to describe the chairs' real histories and project their possible futures. ■

From the forests of North America (where their various timbers were grown), to an intensive week of manufacturing in the workshops at Benchmark Furniture, this book describes how the chairs came into being and the design concepts that led this process. Visions of their futures are then conjured up by some of the UK's most exciting writers and poets, with accompanying photography by Petr Krejčí. Meanwhile, a pictorial timeline within the cover folds, by Livia Lima and Fabienne Hess, illustrates the chairs' eventful lives and hints at their eventual demise. ■ There is, of course, a true and detailed story for every single product in existence, yet this is typically overlooked in the market place, where attention naturally gathers around the retail moment. This instant of commercial exchange, so crucial to industry, is only a snapshot in the life of a product, yet it has come to dominate the whole process of designing, making and owning objects. Images of new products call out to us in two-dimensional perfection, whilst the detail of their physical manufacture – the technology, materials, energy sources, geography, transport and the people who make

them – remains a mystery. This emphasis could lead the designer to focus predominantly on aesthetic appeal and the corresponding price point. The question is whether the ongoing debate about the environmental impact of unsustainable production will bring about a change to such an approach. ▲ This book and the twelve chairs that feature in it are the fruit of collaboration between Platform 15 of the Design Products MA programme at the Royal College of Art (RCA) and the American Hardwood Export Council (AHEC). Our joint objective was to widen the focus of design considerations to encompass the full life span of a product and its potential effect on the environment. This was achieved by engaging students in a practical demonstration of designing and producing a chair from American hardwood within the discipline of the emerging science of Life Cycle Assessment (LCA) (page 113). ● Hardwood is a fantastically suitable material for such an experiment: a beautiful, living resource that collects carbon during its growth and stores it indefinitely during processing, from tree to lumber to product. As a manufacturing material, timber is versatile in the extreme, making the project as much an exploration of hardwood's many engineering and aesthetic qualities, as an exercise in sustainability. ■ Supported by the expertise of sustainability consultants PE International and Sean Sutcliffe and his team at Benchmark Furniture, the consequence of every design decision was carefully analysed in order to develop a holistic approach that took into account the many complex details of manufacturing (kiln drying the lumber, powering a veneer press, the environmental impact

of glues, transportation etc.), as well as the success of the product in use (functionality, longevity etc.). ■ Yet it is not only numbers and durability that matter. There is also an inherently nebulous task of equal importance if LCA is to assist industry in reaching sustainable production: the designer must create a design that will have an aesthetic relevance that will last as long as the chair. How will the design affect what happens to the chair after it has been sold? Will it still charm? Will it still be wanted in twenty, fifty or even one hundred years' time? ▲ It is in the detail of use, care and occasional repair that we develop strong relationships with our favourite objects that can prolong their useful lifespan. And it is in trying to understand and facilitate successful life stories for objects that design becomes such a fascinating and demanding subject. By extending our attention to the whole life cycle of a product we can, perhaps, enrich the design process and the objects we make, whilst reducing the detrimental impact on our planet.





# STORIES



## THE NOT FULL STOP

*Joe Dunthorne*

*This bench is dedicated to the memory of Anna Linsell, David Martin, Rich Kirby, Petra Lossing, Paula Hiden and Larry Gordon, who all loved sitting here, together.*

They had decided to get the dedication made now, while they were alive to enjoy it. Petra liked sitting in the middle, feeling the cool bronze of the plaque under her left thigh. It had been her week to carry the bench to a new destination. Of late, there had been a bit of oneupmanship, taking it to difficult or obscure places: between chimney stacks, the lock at Grand Union canal, rush hour on the tube. The canal had been fun, lifting their feet up each time a houseboat passed but Petra decided she wanted something more classic: a circle of trees on top of the Heath, an unrivaled view of the six odd-shaped skyscrapers down near London Bridge. Six skyscrapers, six friends. A seventh building was in construction, and feathered with cranes, which she felt, would spoil everything.

Arriving on the Heath, she was narked to find a man, cross-legged, right in her spot, taking in the spectacle. She approached. It was not easy to carry the bench subtly and she was reminded of her great-grandfather trying to quietly read one of those old-style broadsheets.

The man saw her. "Am I in your spot?" he said.

"It's as much your spot as it is mine," she said, lying.

He frowned and cast his eyes over the bench. "You look

like an ant carrying a segment of leaf many times its own size," he said.

The man's name was Gus Holder. They sat at far ends of the bench, for privacy, but got on so well that they slowly crept along the seat towards each other, their thighs meeting on the plaque's cool bronze. It would have been romantic had it not been such a very long distance and had her five friends not arrived.

All seven of them sat side-by-side. The next week, the plaque read:

*This bench is dedicated to the memory of Anna Linsell, David Martin, Rich Kirby, Petra Lossing, Paula Hiden and Larry Gordon, who all loved sitting here, together, with their good friend, Gus Holder, who they forgot to mention at the start.*





## OUT OF THE WOODS

*Tiffany Atkinson*

comes the hand  
and its delicate fretwork;  
how little a man needs  
to carry his weight in the end.

Perhaps it's a dud summer  
and rain has run all afternoon  
the white length of his forearm;  
perhaps he is sickened or lost

or his house repossessed  
or the world has burned down  
to a barrow of ashes and bone  
or the guests have rolled up

unexpected in breakable outfits  
and there is nowhere safe to sit.  
Quickened with need he will crib  
from the compound tense of wood

a single unfoldable rune for still  
flight, one for each soul in its  
hobble of flesh; and this is how  
whole new cities flower overnight.





## THE FLOATING CHAIR

*Gillian Clarke*

Remembering wind in the white oaks  
I plant my chair in a wilderness, settle it neat  
as a lark's nest in a cleft crushed in the grass  
under buzzard and crow, the wind-blown flocks  
of curlew, clouds, ideas, words.

Remembering cherries shaking foam from their hair.  
I launch my chair on a wave for the spray on my page,  
the taste of salt, the snap of a sail,  
words homing in paragraphs over the sea,  
a silver leap from the depths.

Remembering songs of chainsaw, chisel, plane,  
I float my chair on a floor smooth as a lake,  
its mind on reflections. I consider carpenters, makers,  
hands silking the wood. A stipple of thought  
surfaces like a trout, a tug on the line.



## SIT DOWN

*Sarah Salway*

‘Sit down!’ My mother keeps messaging me, but I know what she really means is stay out of the way.

I try, but just then a Femcouncil representative bustles into the house and I nearly knock her flying. Only the mov-photo display of my grandmother smiles back at me from beneath the flashing countdown display. If she’d have been there, we could have laughed about it together; some people, she’d say, have a knack of getting in the way.

I slink through to Granny’s bedroom. I want to find the static photograph of my grandfather she showed me once. She said I needed to know that there had been a time – not so long ago – when men had been allowed to live in houses with the women.

‘Marie,’ Mum’s voice threads through my thoughts just as I reach the door. ‘Where are you going?’

I go back to where she’s standing, surrounded now by members of the Femcouncil.

‘Sit over there.’ Mum points at one of Granny’s old-fashioned plastic benches. ‘They’re about to turn off your grandmother.’

\*

Two weeks later, Mum hands over an envelope with my name typed out on the front. I weigh it in my hand. I didn’t think Granny had any of her paper stocks left.

‘We had the final wipe-out today,’ Mum says then.

I'd forgotten Mum's appointment with the Central Computer System. I say something stupid about being sorry, and Mum puts her hand on my shoulder. It's only for a second, but it's a real touch, and when I go back to the computer, I keep putting my hand to my shoulder so I can feel where Mum's hand had been.

\*

'Dear Marie, To be fifteen is to be at the start of all that is good about life,' Granny writes and I wish she were still here so I could tell her the truth. But I read on, because I've always wanted to know what thoughts you would think so important to leave behind when your memory was about to be wiped clean.

\*

'A chair?' Mum shouts. 'Why couldn't she have left us something useful, like data space?'

I shrug, and follow Mum's gaze round the house. I know what she's thinking. There's nowhere to put a chair.

\*

We find the chair at the storage centre, folded up and hidden behind two boxes of books. Mum starts pulling out books one by one.

'Imagine,' she says. 'This is how people used to get information. No Femcouncil filters.'

I blow cobwebs off the wood, and slowly open the chair. It creaks a little at first but then each of the legs unfurls like

the computer cat does in the mornings. I pull down the seat and sit down.

Mum's got her head buried in one of the books now. Literally buried. She's sniffing it, but when I cough, she stands up and stares; the books she's carrying in both hands balance her.

'I'm sure I remember that chair,' she says. 'From before.'

\*

Although lying in bed is forbidden outside sleep times, I think, what the hell because we're probably breaking all Femcouncil rules anyway, so I prop myself up at a better angle to stare at the chair. I've heard about the times before the melt-down when ordinary people were allowed to make things for themselves, and I shift from the bed to put my fingers over where someone years ago put theirs.

The wood gives a little under my touch, and I've just shut my eyes to feel it better when Mum comes in with a bottle of linseed oil and a duster.

'Would you like me to give it a polish?' She seems hesitant, this mother of mine who has never thought twice about anything before, especially about whether she is right or not.

And as she carefully strokes the oil into the wood, she talks direct to me. It's been several weeks since she's used parental thought control.

She tells me about what her mother, my grandmother, was like as if I never knew her.

More oil, more wood stroking. As Mum talks, I wonder whether the person who made this chair is still switched on.

If she can remember visiting the forests where the chair's tree parent came from. We only get limited access to photo images of trees because it's rumored that men live in the woods now. I think again of Granny's photograph.

I swear the chair makes my room smell of how I imagine a tree to smell. Not of course, that I've ever smelt one; only elite fertile women get to visit the wood sanctuaries these days, although we're not supposed to know that. Babies are left on doorsteps as rewards from the Femcouncil; that's how I came to Mum.

'Look,' Mum says then, and she's peering deep into the chair as if she's reading it like one of the books she's always got her nose in nowadays. I get off the bed and squat on the floor next to her.

'Even the joints are wood,' she says. 'It's all part of itself.'

So I show her then how when the chair is folded up, it's as if we have our own wooden wall. Now that Mum's oiled it, the chair opens and shuts without creaking, and together we make it appear and disappear at will.

She claps her hands. 'Mum would have loved this,' she says.

'I think she wanted us to see it,' I reply. And then I say, 'It's ash, the wood. I asked my comp-tutor.'

'Ash,' Mum repeats as if the taste of the word is something she'd forgotten, and it's then I realize that we are holding hands, that my hand has slotted in hers as smoothly as if my skin remembers hers, just as the chair and its joints still know the forest. I don't want her to use parental mind control but I hope that both of us are thinking the same thing – that while love may fold up sometimes, even when

it takes on a different shape, it just needs to be opened up to reveal it has kept its own kind of loveness. Just as my grandmother's chair kept its woodness for all those years.

'Sit down,' I tell Mum. But what I really mean is stay. Stay here, in the way.





## LEFTOVERS

*Tiffany Murray*

Last thing I recall was throwing Momma's chair out the kitchen window.

Momma said the worst of me was not sticking to guns I'd loaded, aimed and was ready to shoot; but today, the day of the fire, the day I sent her on her way, that old chair just begged me.

I couldn't let it burn.

Crazy to think it was this morning Preacher stood there lecturing me on how a body's got to go clean to heaven, but it made me happy Momma going with those berry stains on her fingers, them pickling splashes on her palms. To me it looked like she was taking a little of this life, her life, with her.

But I minded Preacher. I scrubbed the walnut table. I got lye, and a hunk of red oak bark - tore it off like a raging squirrel- and I cleaned Momma's kitchen table off good. I cleaned buckwheat flour, sticky drips of maple, husks of pecan and old bacon grease from those grooves: my bucket cleaned every memory of every meal until it was like Momma and me never ate here.

I pulled out her bright chair, like it was waiting for her. 'Ready,' I told them, and they carried Momma through on their suit-black shoulders. Preacher whining his prayers in her wake.

Her casket was black cherry; Momma had me fell the tree when she felt that first growl of pain. I hated that day. Blackbirds, jaybirds, me: we all had to go a season with no

burst of that blue-red juice; all of us mourning that stump of a trunk, but Momma wanted it for her last resting place. 'Get them to measure, get the mill to dry and plank it up. Then you colour it, Rae, you work your magic.'

I did: I was proud. Just like her chair, Momma's coffin was stained, pickled and burnt with every colour you could dream of.

I stood in that kitchen with Preacher, listened to him mumble; watched his men watch me, then I stared up at the shelves of jars and bottles. All that preserving, boiling, labeling we done, Momma's shelves creaked with it, 'For lean times, Rae-girl, you got to keep those wolves from the door.'

I thought about the wolves in black, them standing right inside my door.

'Here,' I told them, silver in my opened hand.

Preacher stopped his mumbling, took the coins. 'We'll be back after the wake, Miss Rae, give her a Christian burial,' he nodded and they marched out.

I didn't start with Momma's plan until I saw their black hats turn sharp towards the pinewood track and on to the road that takes you down the mountain. Soon as there was nothing but man-smell in Momma's house, I ran for the hickory and the oak chips.

I was behind time. I'd wanted the whole day to get out of here but looked like I'd only have the afternoon. I saw the sun catch Momma's jars – the ruby juice of her spiced cherries, the sharp black of pickled walnuts- and my belly twisted for them, but they had to stay with the house: it was Momma's wish.

The oak and hickory chips were tight beneath the kitchen table. I was ready. I took a crowbar to the lid and I gave Momma raspberry juice for her lips; a smudge of blackberry for her cold eyelids and I painted pretty indigo swirls on the backs of her hands.

‘I want it like the Vikings, Rae,’ she’d said, ‘read about Vikings when I was a girl because I was smart as the stars. I want it all gone, Rae. Don’t want nobody taking nothing. Don’t want nobody taking you. You’ve got to be gone, my little Rae. Like you weren’t even here.’

I took the rag and the gasoline, and I lit her.

Sweet smelling smoke wrapped us both up snug before the flames came. I waited; hand over my mouth.

That was when I saw the chair: Momma’s chair. I suppose it was a need -that thing Momma called sentiment- but whatever, I picked it up and I threw it hard at the window. Didn’t expect it to crash through first time, didn’t expect it to let the air in and the fire to leap out and try for me. Didn’t expect a slap of burn on my left cheek.

I had nowhere to run, fire had shot behind me and the door wasn’t a door no more. So I jumped -same way her chair had gone- burnt my hands good on the hot window frame.

I crawled through our old grass and lay on the ground beneath the maple tree and I hacked and retched and breathed and laughed.

\*

It sits in the clearing with me now, Momma’s chair. Can’t do much else with it, I figure, except set it on the ground.

The sunlight's catching it, all those colours coming clear, and it's strange to see a chair in the woods like that. I lean against a white oak, a fist of comfrey leaf to my face: Momma's last slap.

I ain't no fool. I got Momma's money, rolls of bills in both my shoes. 'You take it, Rae, before he comes back and beats it out of you. Take it and burn his goddamned house to the ground.'

'Yes ma'am.'

From here I see the smoke from our mountaintop: Momma's still burning. I take my rope and I thread it in and out of the back spindles of the chair. I strap it to my back like it's a child.

With the money in my shoes and the chair on my back there's a whistle on my lips and I'm heading down these mountains. I'm going down to catch the breath of the ocean, then I'm going to the cranberry lakes -red as Christmas - and I'm going to learn me how to swim.





## NEW CHAIR

*Jenny Valentine*

My ghost can't touch it, but I can.

The day I bring the chair home, I know he is watching. I don't see him but I know he is there. He is always there.

He stays in the dark room with it when I go upstairs to sleep, and he wakes me, just before morning, for an explanation.

I have brought something new into the house. I have brought something he can't touch because he has never touched it, and has no memory of how it once felt.

It is the only thing here that he has never put his hands on. It is the first new thing I have bought since his death.

Alive when he was, young at the same time, and now both changed. The ash tree to this chair, the man to an echo, a presence, a just-leaving of the room.

\*

Downstairs, the chair sits at the window, facing out, just like he did, watching the morning cross the garden towards it.

It treats light differently from the rest of the furniture, which swallows it and will not give it back. It lets it wash across its pale, grained planes and returns it generously to the room, somehow lighter than before, like a patch of pure sun in a forest, leaf-dipped and golden and agile.

This chair has taken to change better and faster than I can. It doesn't mourn its forest: its swathes of ash and oak and maple, of beech and birch and cherry and walnut, the dappled air, the whispering breeze.

It is reborn and handsome with it. Its newness has sheen and sense of purpose. It looks forward while I have only been looking back.

\*

My ghost wants me to show him everything, wants to feel through me how it feels, this brave new chair.

I follow the sharp, true edges with one finger. I palm the soft joins, gently made, deceptively simple, wood plunged through itself, soft as butter, quick to heal. Its angles look effortless, as quick as folded paper. Its surfaces are intricate with the ash's fingerprint, with the sapwood's own watermark and pattern. I smooth the untried seat, touch the shallow, folded lip that will cradle the backs of my knees, feel the curve and strength of its slender legs, expertly turned.

I sit. The slight recline of the chair's back meets mine and holds me there, at the window. Together, we watch morning come to an empty garden.

We sit, and I tell my envious ghost, without words, what a beautiful thing it is, my new chair, and that, at last, I am beginning to look forward.







## THE TIP OF THE LAND

*Aminatta Forna*

There was a window and beyond the window there was the ocean and a river and a pointed slick of land between the two.

The first morning he stood alone in the room. His parents were somewhere, still in bed in the adjoining room perhaps, or they might not have been there at all, they might have gone away and left him there. When he thinks about it years later, he cannot remember ever seeing them together again after that day. But right now he can see the sky and when he raises himself up on tiptoe he can see the water, so he tiptoes, hands outstretched, losing his balance over and over, he tiptoes until his calves ache. There is no-one to pick him up, to lift him and stand him on the sill where he might lay his palms and his forehead against the glass.

During the day there are hours spent on the beach in the company of his aunt, whose house this is. He searches the tideline and collects pieces of salt-soaked, water worn wood and lumps of polystyrene smeared with tar. Sometimes his aunt joins him. Together they find a large artichoke. Art-ee-choke, he repeats. His aunt appears to possess no sense of danger: she picks up stinking crab carcasses and tosses them over her shoulder, dispenses with footwear, grips his hand and pulls him after her into the water, falls dead asleep on the sand.

Oddly he never associates this ocean with the other ocean, the one at the window. Another time he is in the room alone again, it is evening. The sun floats in the sky above the

sea, drifting downward, towards where the land ends in a point. He waits to see what will happen. When the sun dips out of the line of his vision he fetches a stool from the other side of the room. He easily pushes it to the window and climbs up. Nobody is there to tell him to stop. He sits and then stands on the stool. He holds himself steady, perfectly still and watches the sun drop into the sea. He climbs down and pushes the stool back to where he found it, covering his tracks.

In the morning he remembers the sun's slide into the sea. He wonders if it is still there, under the water. When he gets up and leaves his bedroom he finds the sun in the sky. He upends the stool and pretends to be captain of a ship surrounded by rigging until he hears his aunt's call.

The next evening and in good time he positions the stool in front of the window. Again the sun disappears into the water at the exact point where the river meets the sea, at the tip of the land. He thinks: if I walk to the end of the land there I will find the sun, though he does not think that exactly because he doesn't yet think with words. Rather he feels a tension in his groin, coupled with an imagining, of the sun glowing in the undersea dark, his face reflected in the water's surface, sensations of both coolness and warmth. He doesn't return the stool to its place, but leaves it where it is.

The evening of the third day, when the sun begins its descent, he leaves the house, heading in the direction of the tip of land. He walks along the beach, which is the same and different from the beach where he spends afternoons with his aunt. This beach is the one he sees from the window:

darker, emptier, longer than the other beach. He holds the picture from the window in his head and places himself in it. He is barefoot and has never walked this far without his shoes. He walks and walks, but the distance grows and the sun outstrips him. By the time he reaches the end of the land the sun has gone. He searches, but does not find it. When he returns to the house it is almost dark and his aunt is waiting for him by the door. He thinks he will be in trouble, but his aunt, who anyway talks to him like he is an adult, only asks him if he found what he was looking for. She listens as he tells her about the sun and serves artichokes with melted cheese for their supper.

Four decades later, at the end of a long hike somewhere north of Vancouver, he stands surrounded by trees looking at a view of the sea and a low sun. He remembers his search for the sun, and his first wife whom he married because she reminded him of that aunt.



## SOLITUDE

*Patrick Gale*

The Solitude chair outlasted her marriage, which ensured that she never forgot its name. She had every expectation it would outlast her.

They bought it together, naturally, at a student finals show, back when buying things was one of the ways they demonstrated their togetherness.

He had a theory that sets were a domestic tyranny, so everything in the household – from coffee cups to pillowcases – should be chosen singly, for its own particular charms. Which meant that when he left her for the Minimalist, he generously bequeathed her a houseful of inanimate, mismatched egotists clamoring for favour.

The Solitude chair began at the head of the dining table but didn't play well with others so soon promoted itself to isolation in the bedroom. There it married well with the puritanical bedframe he had insisted on, whose would-be erotic posted headboard meant she always needed extra pillows to make sitting up to read even bearable.

He admired the chair's prayerful quality, its honeyed grain, its witty echo of a cathedral misericord. She liked the way its sturdy base promised that it would never, ever give way while its bony arm and backrests seemed an invitation to gymnastics.

Of course he was pretty advanced in yoga and relentlessly competitive, so when she eventually confided the way the chair on which he felt the urge to meditate seemed to invite

her to perform a handstand, he did just that. For two electrifying minutes, he raised himself upside down, hands on the hand-rests, surveying her and the room in his humourless white pants while she watched from the bed, amazed to have a husband so strong and flexible and worried nonetheless that a favourite chair was about to be broken.

Now she realizes those minutes upside down wrought a destructive revelation. Upside down the flat was revealed as cluttered, the wife as too round, too incapable of handstands. In its way the chair had proved a false friend.

The Solitude chair continues to haunt the bedroom. Its Quakerish qualities of simplicity and endurance are a constant rebuke, harder to ignore than her mother's needling voicemail messages. *I'm still here for you*, it sighs, like some bonily resilient aunt. *I don't mind being stuck in here where no visitors see me. I don't mind being buried beneath clothes. We both know that I'm right and strong and true and when you're ready to clear away all this junk and sit on me and finally bring some order to your wayward mind, I'll be here. I'll be waiting.*







## THE SHADE

*Damian Barr*

Five leaves like the fingers on a hand. James lay on the dry patchy grass beneath the hickory tree and looked up through the canopy. He picked out one leaf and stared at it until his eyes lost focus. He'd been lying here for waiting for her since the leaves were rinsed absinthe with midday sun. Now, in the Tennessee twilight, all the countless thousands of leaves were rustling together, getting ready for sleep.

He shifted uncomfortably rolling a nut out from under his right shoulder. He reached behind himself with one hand and picked it up. This pecan would never see a pie, it was at least a year old, maybe two. It was turning golden. Maybe if he left it here under this tree for a hundred years it would turn to solid gold. Then he could make a ring to put on the finger of the girl who lives in the big white glowing house beyond the trees. Maybe then things will be different, better, right.

Everything about Isabella is the purest white—her big house with its pillars, her skin that the sun never dares to touch, her bell-shaped skirts, the tiny satin shoes he glimpsed when she was stepping down from a coach pulled by two white horses. That was the first time. He looked at her then and she looked right back and he felt he'd been seen by another person for the first time in all his nineteen years. Then she was being helped down by the coachman and he was being whipped out the way. But she'd seen him.

James held his hand in front of his face as the last of the sun raced away to a corner of the sky. He wasn't black. He wasn't white. Sometimes he was neither. Sometimes he was both. He wasn't a slave and he wasn't a master but someplace along the line he'd been both. Servants were lighting the lamps in Isabella's house. Would he see her face at a window tonight?

A pastor who'd come down from the north said all-god's folks were equal and he'd taught James to write and anyone else, man or woman, that wanted to. So he wrote Isabella that he loved her and he thought she loved him too and he put the message inside a pecan nut and weighted it with gravel and threw it through the window he knew was hers. He said he'd be here—waiting under the hickory tree. And so he waits. Even now.





## SONNET TO THE PHYLLIDA BENCH

*Luke Wright*

We'd make a damn fine couple, you and I.  
I'm told you like to shrink into a party.  
Well, I don't. I'm huge, verbose and arty,  
I'll slur and quip until the last Goodbye.

Just picture it my dear, me on your back  
Martini glass raised louchely to the light  
regaling verse for you, oh what a sight!  
To take my heft without a single crack

takes quite a girl! A heritage of oak.  
Such volume for a modern lass! Such strength  
yet so light, elegant and solid bench.  
And when the grog is all gone, my voice broke,

when men have zig-zagged off, when we're alone,  
I'll stoop, uncoil your legs and carry you back home.





## A FALLEN CHERRY

*Gillian Clarke*

I imagine this is the cherry  
young Abraham Lincoln felled  
and facing the storm of his father -  
'Did you cut down my tree?'  
chose truth, 'I cannot tell a lie.'

Felled, fallen on the forest floor  
absorbing sunlight, darkening  
under the passing shadows of wings,  
truth laid down like history and held  
inside the heartwood, leaving this,

a seat for a wanderer to find,  
and close by, maybe, three off-cuts  
bark-side down, face up, sawn level  
for a book, a pen, a sheet of paper,  
a dropped cherry stone, a poem.



## WELL PROVEN CHAIR

*Stella Duffy*

I am aesc, old and newly made.  
I am Yggdrasil, the Viking's World Tree, I gave my  
spears to Odin and to Thor.  
I am a Gaelic guardian tree, I heal babies, feed sickly  
newborns a sticky sap of life.  
I am Fraxinus, firelight.

I am ash, ashen, ashes to ashes, shock resistant, resisting  
shocks and now, I am this.  
Resist this.

Take waste, wood waste, wood turned, would turn  
waste into – me.  
Remake, remould, refire, cook me up.  
I will burn all night, keep you company with light,  
And –  
Then –

The baker does not sit, does not need to sit as she kneads,  
all her body in the action, all his energy in the activity,  
the baker, he she is it.  
Is the action.  
From toe-tip tiptoe feet to fingertipped palm.  
Pummel push, punch, pump.  
Channeling all into the effort of creation, recreation  
of re-creation.

Cooking it all up (cooking me all up) in a wood porridge,  
please pottage – pot/ash/me.

And.  
Then.

Sit now, quiet now, rest and (don't look) ... look!

In the quiet, covered, warm – I rise.  
Phoenix on these ashen legs, I tiptoe, north-south,  
north-south.  
Dance a foxtrot of four legs fast, four legs slow, four  
legs good, and go.  
Go.

Come for a ride? A rise?  
Arise.

# CHAIRS

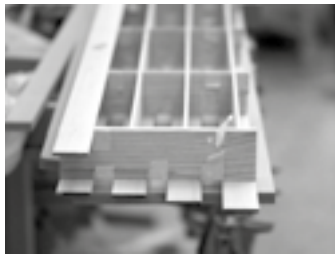


# B E E E N C H

*Petter Thörne*



By employing the engineering principles of the box section and the technique of half-lap jointing, Thörne has stretched the standard configuration of a bench to an unbelievable degree. Made from slender 5mm (1/4") thick strips of American ash, the 3.5m (11'6")





long hardwood bench exploits its material so efficiently that it is light enough to pick up with one hand. Looking like a steel I-beam wrought from wood, the incredible span makes



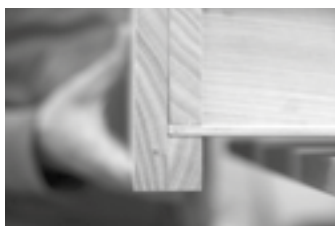
one question the nature of the material. The legs maintain the strong, industrial language of the seat both in their design and in





the way they are explicitly bolted on (easily removed for efficient packaging during transportation).

Life cycle considerations drove Thörne's desire to use as little material as possible from the smallest available profiles (which consume the lowest possible amount of energy during kiln drying) and his



design achieves great strength without recourse to standard techniques such as glued laminations or metal brackets



– two things that would have had significant negative effects on its environmental footprint.

However, the LCA reveals that, the energy needed to machine those many slender lengths of solid ash eats into the advantage gained by this efficiency.

# DESIGNED LEGACY

*Michael Warren*

Upon realising that 25mm (1")



thick timber stock requires exponentially less energy to kiln-dry than thicker stock, Warren set out to

design a piece of furniture that incurred the lowest possible environmental footprint, using an extreme economy of materials as his design strategy. The result

is a fantastically light and elegant bar stool that plays on perceptions of strength. Each slender element



of 18mm (11/16") square section is connected to its neighbour, using miniature versions of the substantial

joints used in traditional green-oak timber framed buildings.

Other subtle details meet the challenge taken up by Warren. For example, the curve of the seat is formed without the need for the

energy-hungry process of steam bending by instead laminating two super-thin and therefore flexible sections together.

A fascinating exercise in efficiency, Warren's 'purist' response remains at this stage for exhibition only. Despite the fact that it can



withstand the weight of a person, its fragility raises significant concerns about longevity, one of the most im-

portant of the LCA factors.

Could the design be developed into a low-cost, short-life seat for exhibitions and presentations?



Warren made several versions of this design during his week at Benchmark, his favourite being from

American sapgum, a particularly lightweight timber.

# FLOATING CHAIR

*Tom Gottelier &*

*Bobby Petersen*



Gottelier and Petersen's response to the brief was to put a seat onto water. Interested in the way digital communications have altered the ways in which people spend



their moments of repose, they set about employing mobile phone

technology  
to provide an  
experience that  
puts people in  
touch with the



physical elements. This diminutive  
boat possesses a newly developed  
propulsion system that will follow  
a predetermined journey chosen  
by its passenger via the GPS  
functionality of a mobile phone.  
Assisted by boat builder Will



Reed, the design  
of the vessel  
evolved from  
a coracle-like  
form (which has



too great a tendency to spin), into a more conventional boat shape.

Using solid and epoxy-veneered American cherry for the hull, alongside heavy, durable American white oak for the keel, the boat



evidently uses a greater volume of materials than most of the other designs. However, it also



offers users its own and very different experience. This reflects

the difficulty in making direct comparisons between different products' environmental footprint. Within the context of boat building, a UK-based study has found that, compared with glass-reinforced-plastic and steel, wood-epoxy hulls have the lowest environmental impact despite the petroleum-based resins in epoxy glue.



# FOLDED CHAIR

*Norie Matsumoto*

An unconventional interpretation



of traditional  
handcrafted  
furniture-  
making, *Folded  
Chair* began  
with the making  
of a non-  
functioning

model of the  
chair in its  
folded state.  
Asymmetric and  
baffling, this



model looked like a collection of unrelated bits of timber. For Matsumoto, this



lack of apparent function provided the freedom to appreciate the



natural beauty of the timber grain, without the distracting notion of a chair. Working in reverse from this point, she went on to



develop a chair that unfolds in an

unexpected manner. The mix of light American ash and American black walnut accentuates this quality of asymmetry.

Made entirely from solid timber, and using tried and tested traditional jointing methods, this chair has been

designed for a long life. The use of machines in its production



was limited to the processing of the square section and rectangular elements. All jointing was then crafted by hand – a luxury with regard to its financial cost.

However, in terms of sustainability, this represents no cost at all because human labour does



not count in a life cycle assessment.



This fact poses interesting questions about how and where value is located.

# LEFTOVERS CHAIR

*Lauren Davies*

The way in which any good home has at its heart an energetic and resourceful kitchen underpins this design, in which a grand tour



of culinary skill is played out on the archetype of a Windsor.

A whole host of food-related American hardwoods are

used across the different components of the design, which Davies

describes in the form of a recipe;



*Black cherry bow  
back steamed for  
two hours and  
then bent; smoked  
hickory legs  
specially selected  
for strength;  
hard maple  
spindles dipped  
in various*

*dyes made from saffron, paprika,  
berries, beetroot,  
pomegranate and  
onion skin; and  
finally chair seat  
hand carved from*





*a mix of different hardwood off-cuts pickled in a month old galvanised steel and vinegar solution'* and so



on. In the end, we have a total of nine hardwood species represented, all

enriched by various food-based preparations.

Similar to good home cooking, this chair is at once humble and



extravagant.

By adopting the ethos of leftovers, Davies manages to

make a virtue of  
concocting a fine  
piece of furniture  
from off-cuts  
and small-



dimension elements. However,  
this should be  
set against the  
fact that the  
'melange' seat  
requires a  
slight increase  
in the use of  
glue, with its  
attendant environmental impact.

# NUM. 4

## *Santi Guerrero Font*



Both raw and refined, the visual simplicity of this ash chair means that one could be forgiven for thinking that it was simple to

make. In fact, its unique and explicit jointing required a tremendously high level of accuracy. To accomplish this,





four unique jigs were designed and made. These held the seat and back in position, whilst simultaneously guiding the drill to make the holes for each leg.

The resulting jointing has the legs pass through the ‘folding’ structure of the seat and back, to create very strong and exposed triangular connections.



The mechanical strength inherent in these triangles meant that a



relatively small amount of material was needed at each intersection,

allowing the thickness of the seat and back to be reduced from 20mm to 12mm (7/8" to 1/2").

This brought the benefit of more efficient use of materials, whilst the inherent strength of the



timber and the design should



increase longevity. It is of interest to note that the very standard use of glue and wax in the making of this wooden

chair accounts for one-eighth of the design's total global warming potential.

# PHYLLIDA

*Nic Gardner & David Horan*



An exercise in volume and strength, this design uses both solid and

veneered American tulipwood to create a highly practical flat-pack bench that is as comfortable supporting the weight of eight people, as it is slipped under the arm to be carried to its next location. The volumes

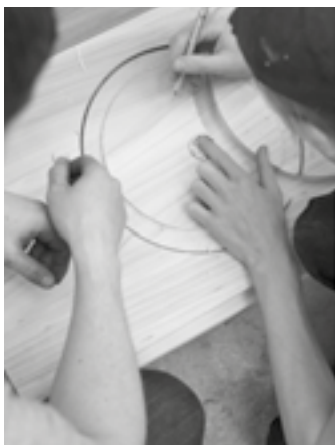


of its stout legs are created by the simple act of coiling two lengths of 1.5mm (1/16")



thick cross-laminated veneer and slotting them into

the circular grooves cut into the



underside of the seat. The rigidity and robustness of this technique is ensured by the fitting of hardwood base rings to the open

edges of the resulting cylinders.



All of this results in a design that takes advantage of hardwood's ability to provide strength and flexibility if handled correctly, i.e. from the solid, two metre-long plank that is the backbone of the bench, (which securely carries all the other elements when disassembled) to the otherwise vulnerable hardwood ply that becomes surprisingly



robust when coiled, to become a double-walled cylinder.

The efficiencies extend to production, as the five components require comparatively little



machining to make, helping Gardner and Horan's portable bench achieve

a comparatively low environmental footprint. Their choice of species was tulipwood as it possesses the highest strength to weight ratio of all American hardwoods.

# SNELSON

*Sam Weller*

There are no joints in this stool.



Instead, the rounded ends of the legs simply rest in three hollows drilled from the underside

of the seat. Free to move, the independence of each of the



timber components (three legs and

seat) is checked by a network of hi-tech, non-stretch cords tightened with a lashed pulley and half-hitch knot. The forces of tension within



this rigging are balanced by the forces of compression within the legs;

postponing the stool's collapse indefinitely.

The physics behind this technique were explored during the middle of the last century

by the artist Kenneth Snelson,  
whilst a student under Richard  
Buckminster Fuller, the latter  
coining the term ‘tensegrity’



to describe  
the technique.  
Inspired by  
a Snelson  
sculpture he

came across in the Netherlands,  
Weller set about applying this  
concept to seating.

The ‘magic’ of tensegrity  
translates to seating in an exciting  
way, because it disturbs the trust  
we understandably like to have  
in anything we intend to sit on.

This is then contradicted by the



no-nonsense  
aesthetic that  
Weller has given  
to each element.  
The irony is

that the strength of the structure  
actually increases with load placed  
on it.

Weller made stools  
in American ash, cherry and  
walnut. With minimal waste  
and the simple approach to the  
manufacture of its very solid  
components, the Snelson stool  
delivers a long life and hence  
a very positive LCA.

# SOLITUDE

*Mary Argyrou*

Stark and solid, the aesthetic of *Solitude* reflects the weight and permanence of the religious traditions and way of life in Argyrou's home country of Cyprus.



Although a domestic chair, it derives its shape from a typical Cypriot church chair: instead of pews, individual chairs sit close together in rows,

defining the space for each member of the congregation. Not very comfortable and with a very shallow seat, they



demand that the sitter be straight-backed and alert. The frame of the chair extends in front of the seat,



defining the space occupied by the sitter's feet and legs.

The seat folds up to allow the user to stand (a regular occurrence during the three-hour-long services) within



the frame of the chair. All the while the chair both protects and controls.



Argyrou envisages her design bringing periods of solitude and meditation into

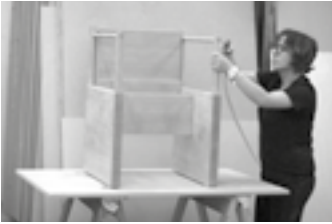
the homes of its owners.

Made from American cherry, the extremely robust sides use the full thickness available from 50mm (2") planks. All other



dimensions were very carefully considered to work from this base, to create

visual order and balance. The result is an incredibly sturdy chair, which



stands in opposition to the lightweight engineering that is a common

response to LCA concerns.

Argyrou has found a different efficiency: heavier use of material offering greater longevity with increased carbon storage.



# SQUEEZE

*Nic Wallenberg*

The job of creating a stackable and



ergonomically  
curved hard-  
wood chair  
would normally  
require high-  
energy processes  
such as steam  
bending or press

moulding, in  
its production.  
Another option  
would be to  
cut curved



components from much larger pieces of timber, leaving a high proportion of waste. Wanting to avoid these conventional processes

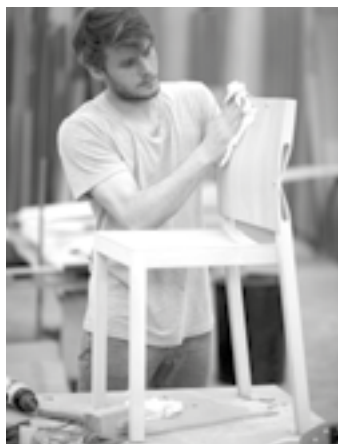


in favour of a more sustainable and efficient alternative, Wallenberg found himself developing a new technique to form struc-

tural bends from straight lengths of timber.

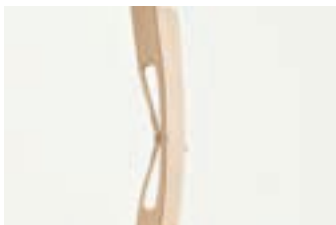
Relying on the unique degree of flexibility that is inherent

in American hickory (a popular species for bow making), a series of experiments showed that by machining asymmetrically positioned slots through the thickness of the timber, it was possible to squeeze



the outside edges together with a simple bolt that forces the, otherwise straight, piece of wood to bend in a predictable

fashion. Applying this technique to the design of a chair required placing four of these timber



the frame of the seat and back,

upon which were glued thin skins of hickory-veneered ply that followed the newly formed contours of the frame.



# TREE FURNITURE

*Anton Alvarez*



Most lumber in North America comes from small, privately owned forests from which individual trees are selected for felling. This allows forests to con-



tinue to develop in a natural, self-seeding manner, unscarred by mass felling.

*Tree Furniture* is a monument to how timber can be harvested in harmony with the forest in this way.

Taking a recently felled tree



trunk, in this case American cherry, a prism-shaped section is carved from its considerable mass with just three

horizontal cuts using a portable sawmill. These cuts only go so far, to leave one end of the log intact and round.



The resulting bench remains where



it was created, precisely on the spot



it previously stood, as part of a growing tree.

The perfectly cut geometry of the seat appears to be extruded out from the misshapen, bark-covered



cylinder of the log, symbolising how this age-old resource continues to provide us with a much valued material.

With no kiln drying or transportation and very limited

use of machines, the production of

*Tree Furniture*

requires minimal use of energy.

However, the durability of its

untreated timber in an external environment

means that natural decay will reduce its potential for carbon storage.

Although, this same deterioration will have a beneficial effect on the biodiversity of the forest.



# WELL PROVEN CHAIR

*Marjan van Aubel & James Shaw*

This chair derives its brutal and anarchic appearance from an ethos of resourcefulness.

Understanding that there is 50% to 80% of timber wastage during normal manufacture, van Aubel and Shaw looked at ways of incorporating waste shavings into the design of their chair using bio-resin.



They found that a curious chemical reaction occurred when it was



mixed with the shavings, expanding it into a foam. By adding colour

dye and varied-sized shavings from different workshop machines, a colourful, lightweight and mouldable material was created, reinforced by the fibres in the hardwood shavings.

Continuing their resourcefulness, van Aubel and Shaw obtained a mould for the seat by using a classic polypropylene chair

(why create a new mould when a proven one already exists?). The porridge-like mixture of resin and shavings was slapped on to the underside of the chair shell by



hand, building up material wherever extra strength was required. The

mixture then foamed explosively to create its own exuberant form, anchored by the simple turned legs of American ash.

The designers' search for an experimental solution based on recycled material and recycled

design is daring and appealing,



particularly from the point of view of sustainability. However, a lack of clear data for the bio-resin prevents

a full LCA, postponing any environmental claims. Moreover, the resin's use is very different to the manufacturer's recommendations, making it difficult to assess the chair's longevity.

# APPENDIX





## FORESTRY

The hardwood forests of the United States are a rich and diverse resource with a great history of regeneration. America is a huge country and for many people it's a great surprise that about one third of the land area is forested, of which hardwoods make up 43% (softwoods representing the remaining 57%). The main expanse of hardwood forests stretch from Maine in the North to the Gulf of Mexico in the South, and westwards across to the Mississippi valley. Running down their heart is the Appalachian mountain range and the famous Blue Ridge mountains of Virginia. The natural forests have a high bio-diversity with a wide range of species of which at least 30 are of significant commercial value. In the Eastern states, the mighty oaks (red and white) are most prevalent, followed by tulipwood (the "queen of the forest"), the maples (including sugar maple for maple syrup), ash, cherry, hickory and pecan (famous for their nuts), sweetgum, black walnut, and so the list goes on. Red alder is produced in the North-Western states. ■ American hardwood forests are not plantations. Fertile forest soils and favourable growing conditions mean that hardwood forests are most effectively renewed through natural regeneration. Selection harvesting is typical, involving the removal of individual or small groups of trees. ▲ The forest landscape has changed greatly over time, largely due to the changing use of, and sentiment towards, trees, water and wildlife. By the early 1900s the forests were largely decimated due to industrialisation and the rising population in the late 19th

Century and early 20th Century. Between 1850 and 1910, farmers cleared about 77 million hectares (190 million acres) of forest land in America and this was coupled with high demand for forest resources for fuel and the growth of the transport networks, towns and cities. Towards the end of the industrial revolution things changed for the hardwood forests when farmers abandoned the rugged agricultural land in the East and Southern Appalachians and migrated to the favoured pasture and arable lands of the Ohio Valley and the Midwest. Slowly, the forests grew back and between 1953 and 2007, the volume of hardwood standing in U.S. forests more than doubled from 5 billion m<sup>3</sup> to 11.4 billion m<sup>3</sup>. This huge expansion of the resource, which coincides with a period of significant increase in U.S. and international wood demand, is testament to a long term commitment to good forest governance and sustainable hardwood production. Responsibility for regulation of American hardwood forests is now distributed amongst agencies at federal, state and, in some cases, local or municipal levels. The long term sustainable forest management strategy is aimed at maintaining and increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest. ■ Today U.S. hardwoods are playing an increasingly important role in the supply of raw materials to the world's building and furniture industries. The U.S. contributes nearly one fifth of the world's hardwood supply and accounts for around 20% of all hardwood consumed in the UK. Despite its global significance, the U.S. hardwood industry is made up of some

four million individuals and other private entities that own the 110 million hectares (272 million acres) of hardwood and mixed oak-pine forest types. Of the private hardwood timber produced, 83% derives from non-corporate, family forest owners. The motivation for owning hardwood forests is not timber production at all; the forests are there to be enjoyed and with efficient management they provide a superb sustainable resource for design.



## LIFE CYCLE ASSESSMENT

Timber is unique in terms of its carbon storage. As a living material, it stores carbon during its growth, and will continue to store carbon for as long as it remains in a product or building. If the components are then re-used or recycled then the storage continues. If no other use can be found, then the timber is burnt for fuel, releasing the 'embodied energy' that is stored within it for a useful purpose, rather than allowing it to rot in landfill. ■ This sounds like ultimate sustainability, however if sustainability is ever to become more than a mere aspiration in design, manufacturing and construction, decisions need to be made based on hard facts using data covering a huge range of environmental impacts to give a fair and rounded assessment. Life Cycle Assessment (LCA) is a scientific method, developed for this purpose, involving collection and evaluation of quantitative data on all the inputs and outputs of material, energy and waste flows associated with a product over its entire life cycle so that the environmental impacts can be determined. ● AHEC has recently released a comprehensive LCA report for kiln dried lumber produced in the U.S. and a study on veneer is still being finalised at time of writing. The peer reviewed report, produced by independent consultants PE International fully conforms to ISO14040 standards. ▲ The report is a comprehensive analysis of U.S. hardwood lumber's profile providing numerical data on Global Warming Potential (GWP – better known as carbon footprint),

Acidification Potential (AP), Eutrophication Potential (EP), Photochemical Ozone Creation Potential (POCP), and Ozone Depletion Potential (ODP). It identifies which processes along the supply chain (forestry, sawing, kilning, transport) are most important in determining each of these impacts. In technical terms it is a “Cradle-to-gate, plus transport” study, covering all impacts associated with extracting the wood in the forest, transporting, sawing and kiln drying the material in the United States, and then delivering the lumber to the importers yard in major overseas markets. ■ Key conclusions of the report found that the main source of global warming impact comes from the kiln drying of the timber, contributing between 8% and 32% of the global warming potential of the production process. It also had a significant impact on other environmental markers, providing 6-26% of the acidification potential, and 78-86% of the photochemical ozone creation potential. These results vary between species and thickness. Thicker and denser lumber takes longer to dry, and hence uses more energy – something that designers and specifiers may like to consider at an early stage in their work. ■ For producers to understand the potential impact of how materials will be used, treatments, fixings, further processing, lifespan and method of disposal all need to be considered, as will the other materials that are used in the final products. To carry the LCA work further, PE International created a tool called an “i-report”, into which it is possible to enter all the variables and produce scores on a number of counts. When making their chairs at Benchmark, the students

measured all the materials that they had used in volume, and also the time that they had spent on each of the machines which was fed into the “i-report”. This drew on not only the life cycle analyses for American hardwoods, but also PE International’s substantial database covering all other materials used. The impacts calculated are: ● **PRIMARY ENERGY DEMAND**: a measure of the total amount of primary energy extracted from the earth. The data is expressed in terms of energy demand from non-renewable resources such as oil and natural gas, and renewable resources such as hydropower and wind energy. Measured in MJ, it takes into account the conversion efficiencies from the primary energy too, for example, electricity. ▲ **GLOBAL WARMING POTENTIAL**: calculated from volumes of greenhouse gases, such as carbon dioxide and methane, emitted by a process, GWP is measured in kg CO<sub>2</sub> equivalent. It is the measure about which we are all most concerned, and it is a good marker for other environmental issues. ■ **EUTROPHICATION POTENTIAL**: the process by which water receives an excessive amount of nutrients, particularly phosphates and nitrates. These nutrients, which typically come from run-off from fertilisers, lead to algal blooms, which in turn deprive the water of oxygen and lead to imbalances and deaths in the aquatic populations. Eutrophication is measured in terms of kg of phosphate equivalent, and kg of nitrogen equivalent. ■ **ACIDIFICATION POTENTIAL**: a measure of the emissions that cause acidifying effects to the environment, which can cause imbalances and the death of species. It is measured in

kg of sulphur dioxide equivalent. ● PHOTOCHEMICAL OZONE CREATION POTENTIAL: a measure of emissions or precursors that contribute to low-level smog. It is measured in kg of ethane equivalent. ● STRATOSPHERIC OZONE DEPLETION: a measure of the thinning of the stratospheric ozone layer (formation of the infamous ozone hole) through the persistence of products such as refrigerants. Thinning of ozone allows more harmful UV rays to reach the earth. Stratospheric ozone depletion is measured in kg of CFC-11 equivalent. ▲ Of course we cannot use sustainability criteria to make direct comparisons between the designs produced as part of this project, as each has focused on different issues. However, this project has been a remarkable opportunity to explore the difficult challenge of establishing and understanding such criteria and how they might be applied and interpreted. ■

*For full reports of each chair visit*  
*[www.americanhardwood.org/out-of-the-woods/](http://www.americanhardwood.org/out-of-the-woods/)*







## DESIGNERS

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## CONTRIBUTORS

**TIFFANY ATKINSON** ▲ Tiffany Atkinson is a lecturer at Aberystwyth University. She is author of two poetry collections, *Kink and Particle* (Seren 2006), winner of the Jerwood Aldeburgh First Collection Award, and *Catulla et al* (Bloodaxe 2011), shortlisted for the Wales Book of the Year 2012. She gives regular workshops and readings across the UK and internationally. ● **DAMIAN BARR** ■

Damian Barr, is a writer, columnist, playwright and salonnière. He has co-written two plays for BBC Radio Four and his first book was published by Hodder. He just finished a memoir for Bloomsbury entitled *Maggie and Me*. He is creator and host of the infamous Shoreditch House Literary Salon. He is on faculty at The School of Life and runs the Reading Weekend. ♣ **GILLIAN CLARKE** ▲ Gillian

Clarke, National Poet for Wales since 2008, is President of Ty Newydd, the Writers' Centre in North Wales, which she co-founded in 1990. She was awarded the Queen's Gold medal for Poetry in December 2010. Recent books include *A Recipe for Water*, and a prose collection, *At the Source*. Her new poetry collection, *Ice*, will be published in October 2012.

● **STELLA DUFFY** ■ Stella Duffy has written thirteen novels, forty-five short stories, and ten plays. *The Room of Lost Things* and *State of Happiness* were both longlisted for the Orange Prize, and she has twice won Stonewall Writer of the Year. She won the 2002 CWA Short Story Dagger for *Martha Grace*. She is also a theatre director and performer.

♣ **JOE DUNTHORNE** ▲ Joe Dunthorne was born and brought up in Swansea. His second novel, *Wild Abandon*, recently won the Encore Award and his debut, *Submarine*, was adapted into an award-winning film. His poetry pamphlet was published by Faber. He now lives in London. ●

**AMINATTA FORNA** ■ Aminatta Forna was born in Glasgow, raised in Sierra Leone and the UK and also spent periods of her childhood in Iran, Thailand and Zambia. She is the award-winning author of two novels: *The Memory of Love* and *Ancestor Stones*, and a memoir *The Devil that Danced on the Water*. ♣ **PATRICK GALE** ▲ Patrick

Gale was born on the Isle of Wight in 1962, raised in Winchester, and now lives on his husband's farm near Land's End. He's a keen gardener

and cellist. His fourteen novels include the bestselling *Rough Music* and *Notes from an Exhibition*. *A Perfectly Good Man*, was published by Fourth Estate in March. His short stories collections are *Dangerous Pleasures* and *Gentleman's Relish*. ● FABIENNE HESS ■ Fabienne Hess completed an apprenticeship in graphic design in Zürich. She graduated from the Royal College of Arts' Visual Communication programme in 2012 after running her own studio in New York. Her work addresses the role of detritus in the digital context. ■ PETR KREJČÍ ▲ Petr Krejčí was born in Prague. He studied fine art photography in the Czech Republic and France before settling in London in 2009. Through his photographic images and films Petr aims to help creators, designers and institutions communicate their works and visions. Petr's approach has its foundations in his personal work that is concept driven, visual and often playful. ● LIVIA LIMA ■ Livia Lima is a London based Brazilian graphic designer. Lima received her MA from the Royal College of Arts' Visual Communication programme in 2012 after running her own studio in New Zealand. Her research and body of work revolves around design and economics, in specific alternative currencies. ■ TIFFANY MURRAY ▲ Tiffany's novels *Diamond Star Halo* and *Happy Accidents* were shortlisted for the Bollinger Everyman Wodehouse Prize. The Guardian called her 'the glam rock Dodie Smith' and selected *Diamond Star Halo* in their pick of the year's fiction. Her collection *Feast* and third novel, *Sugar Hall*, are published in 2013. She is the Hay Festival International Writing Fellow and teaches at The University of Glamorgan. ● HARRY RICHARDSON ■ Harry Richardson runs Committee, a multi-disciplinary design studio, with his wife Clare Page. They met whilst studying Fine Art at Liverpool after which they set up the Gallop studio and gallery space in Deptford, London. Committee has received many awards and has designed for companies such as Moooi, Lladro, The Rug Company and Established & Sons. Harry is also a tutor for Design Products at the RCA. ■ SARAH SALWAY ▲ Sarah Salway is a poet, novelist and writing coach. As Canterbury Laureate, she has been on a literary journey round Kent through its gardens, and is currently writing a non-fiction book about gardeners who have made themselves bankrupt

through their obsession. ● JENNY VALENTINE ■ Jenny Valentine is a British children's novelist, best known for her award-winning novel *Finding Violet Park*. She lives on the English/Welsh border, and is the proud part owner of an ancient hardwood forest, once cleared for paper crop, and now being restored to its former glory. ■ DAVID VENABLES ▲ David Venables is AHEC's European Director. Venables has a specialised background in hardwood, with a BSc in Timber Technology and more than twenty five years experience in the international marketing of hardwood products. He is an acknowledged expert on the uses and applications of hardwoods and global wood markets. Venables has developed a number of technical publications for AHEC, including the *Species Guide* and has pioneered AHEC's unique form of creative marketing that has led to collaborations with some of the world's most famous designers and architects. ● LUKE WRIGHT ■ Luke Wright is a poet and broadcaster. He is the author of six live poetry solo shows and a favourite at music and literature festivals all over the world. He is a regular contributor to the Sony Award winning *Saturday Live* on BBC Radio 4. His debut collection is forthcoming from Penned in the Margins in 2013. ■ SEBASTIAN WRONG ▲ During his fifteen-year career in the manufacturing sector, Sebastian Wrong has accumulated an impressive array of technical skills. Wrong first studied sculpture before going on to establish his own successful manufacturing company. Wrong is also a founding member and Design Director of Established & Sons. Wrong has designed products for Flos and Established & Sons and launched a new project in 2011 called 'The Wrong Shop'.





AHEC ▲ The American Hardwood Export Council (AHEC) is the leading international trade association for the U.S. hardwood industry, representing the committed exporters among U.S. hardwood companies and all the major U.S. hardwood production trade associations. AHEC concentrates its efforts on providing architects, designers and end-users with technical information on the range of species, products and sources of supply. [www.americanhardwood.org](http://www.americanhardwood.org) ● BENCHMARK FURNITURE ■ Established by Sir Terence Conran and Sean Sutcliffe. Benchmark started making prototypes and small batches of furniture for leading retailers with just three employees and a passion for design and craftsmanship. Over twenty five years later it works with architects and designers on a diverse range of commissions for offices, public institutions, hotels, bars and restaurants, making handmade furniture in a sustainable way that will last several lifetimes. Benchmark was the first furniture maker to win the Queen's Award for Enterprise in Sustainable Development and has FSC and PEFC certification. [www.benchmarkfurniture.com](http://www.benchmarkfurniture.com) ● PE INTERNATIONAL ■ PE International is the global leader in integrated product and enterprise sustainability performance with proven software solutions, the world's best sustainability databases and unparalleled consulting expertise. With over twenty years of experience and twenty offices around the globe, PE International enables clients to understand sustainability, improve their performance and succeed in the marketplace. [www.pe-international.com](http://www.pe-international.com)



ROYAL COLLEGE OF ART ▲ Celebrating its 175th anniversary this year, the Royal College of Art is the world's most influential postgraduate university of art and design. The RCA specialises in teaching and research, and offers the degrees of MA, MPhil and PhD across the disciplines of fine art, applied art, design, communications and humanities. There are over 1,100 masters and doctoral students and more than a hundred professionals interacting with them, including scholars, leading art and design practitioners, along with specialists, advisors and distinguished visitors. [www.rca.ac.uk](http://www.rca.ac.uk) ● DESIGN PRODUCTS ■ The Design Products Master's programme, led by Professor Tord Boontje, has a strong culture of experimentation. The two-year course is arranged in small study groups known as 'platforms', each run by two tutors who define the content and focus for project-based design work. [www.designproducts.rca.ac.uk](http://www.designproducts.rca.ac.uk)



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Remembering wind in the white oaks  
I plant my chair in a wilderness, settle it neat  
as a lark's nest in a cleft crushed in the grass  
under buzzard and crow, the wind-blown flocks  
of curlew, clouds, ideas, words.

*Gillian Clarke*