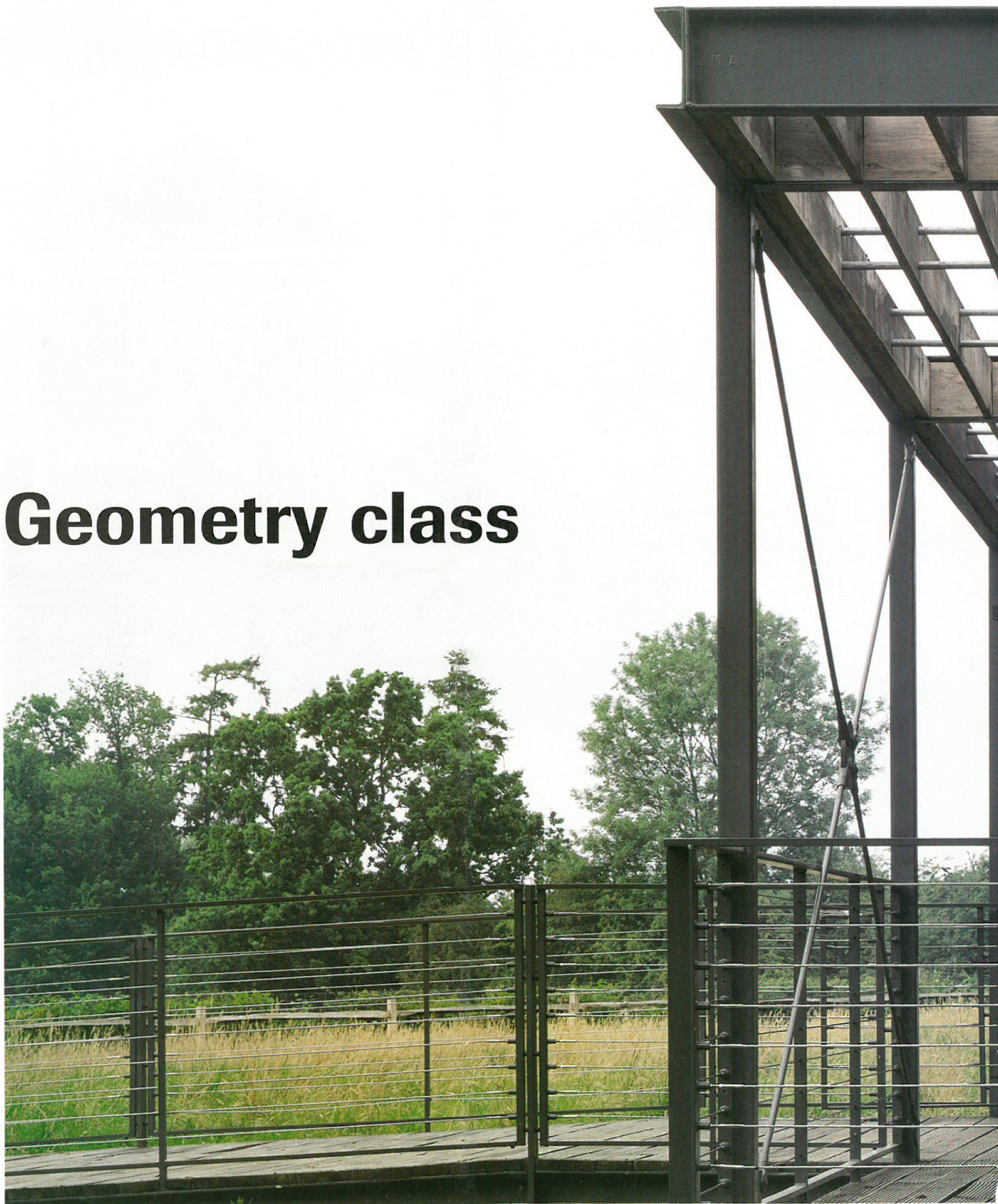


The geometrical precision of Walters & Cohen's visitor centre for the Royal Botanic Gardens in Sussex sets up a relaxing

Geometry class



rhythm in tune with its surroundings. **By Elaine Knutt. Photographs: Dennis Gilbert**

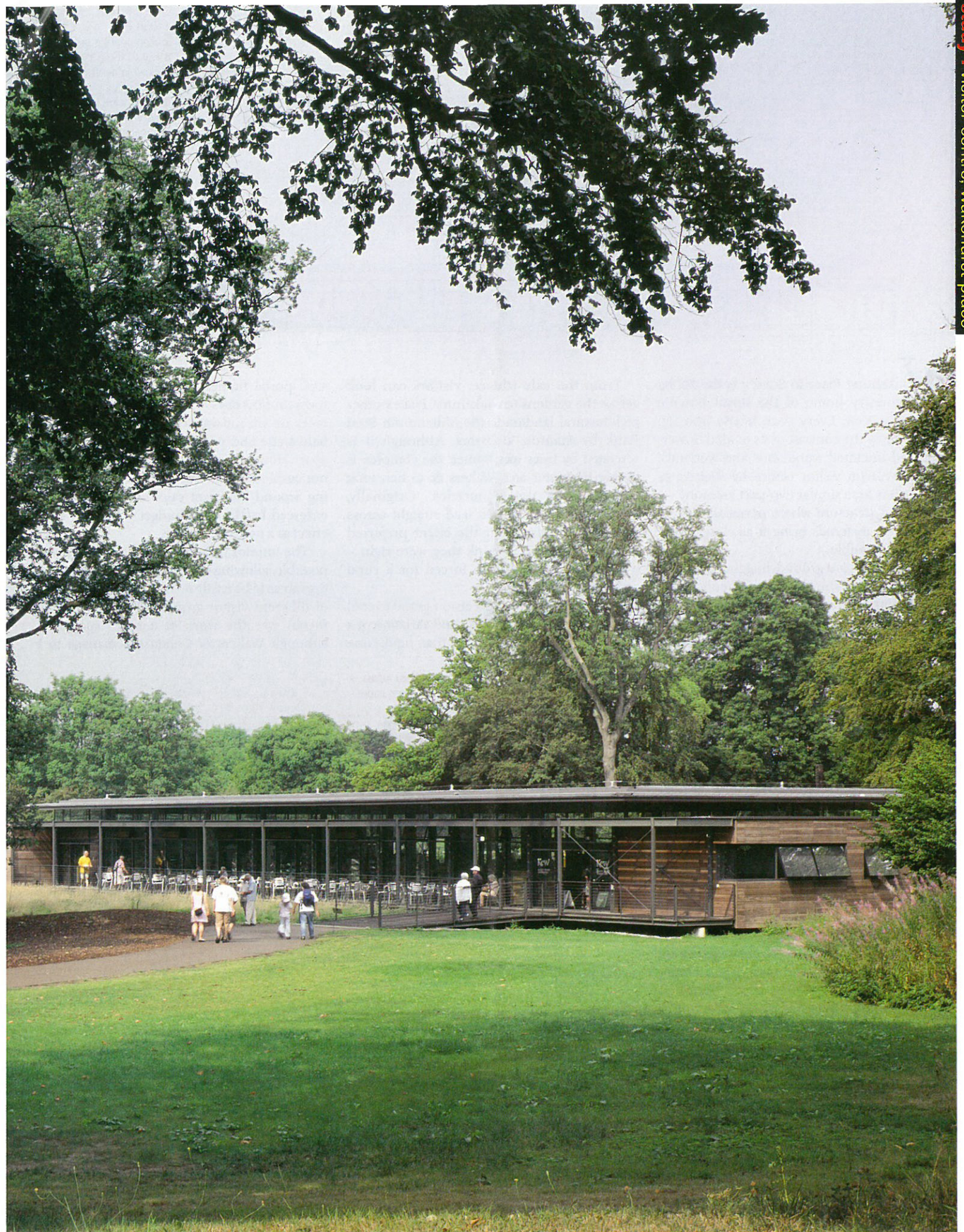
study : visitor centre, wakehurst place



Client	Royal Botanic Gardens, Kew
Architect	Walters & Cohen
Structural engineer	Michael Barclay Partnership
Building services engineer	Waterman Gore
Quantity surveyor	Fanshawe
Landscape architect	Chris Blandford Associates



A flexible layout allows shop, cafe and information areas to be reconfigured.



The building's simple perpendicular geometry is a foil for the soft curves of the Sussex Weald.

Section A-A

- 1 Staff WC
- 2 Staff change area
- 3 Exit to the gardens
- 4 Flexible central space
- 5 Cafe seating
- 6 Servery kitchen
- 7 Service yard
- 8 Service road



Wakehurst Place in Sussex is the 200ha country home of the Royal Botanic Gardens at Kew. Every year, nearly 400,000 visitors enjoy the contrast of its tended flowerbeds and untamed woodlands and wetlands. The new £1.5m visitor centre by Walters & Cohen aims for a similar two-part harmony – a disciplined structure where permeable edges and natural materials bring it as close to the gardens as possible.

The building is a ground-hugging glass and timber box, its simple perpendicular geometry a foil for the soft curves of the Sussex Weald that new arrivals can glimpse from the car park through its full-height glass walls. 'In the planning submission, we called it a forest pavilion,' says project architect Elaine Henderson. The ultimate seal of approval came from a pair of pied wagtails that nested in the plant sales area.

Kew Gardens approached Walters & Cohen in late 2001 to design replacement ticketing, toilet and shop facilities. Watching visitors arrive at Wakehurst Place, it's easy to see why the old facilities sited at the top of a slope had outlived their usefulness. Life begins with prams and pushchairs and ends with wheelchairs, and the path to the new visitor centre eases the journey for everyone.

Now, instead of being welcomed by a steep decline and departing via an assault course, the extended family groups brought together by the gardens begin and end each visit in a light, airy, level-access breathing space. Wheeled transport of all kinds has plenty of room to manoeuvre round the sliding doors, ticket desk, shop and toilets.

The woods come indoors in the honey-toned timber cladding of the two enclosed pods at either end of the main volume, housing the cafe's kitchen and storage area, and the toilets and offices. Outdoors, an overhead ladder of oak rungs forms two robust sunscreens running the length of the building, shading a plant sales area and group waiting point on the car park side and cafe tables and chairs overlooking the gardens.

From the cafe terrace, visitors can look across the gardens to Wakehurst Place's other architectural landmark, the Millennium Seed Bank by Stanton Williams. Although it is screened by trees in summer, the complex is visible in winter and Walters & Cohen took care to align the geometries. 'Originally, we wanted a pathway to lead straight across from our building, but the client preferred a meandering one. I think they were right – it was possibly a bit too forced for a rural setting,' says Henderson.

But the geometrical precision in the overall design – based on repetition and variation of a 1.5m theme – is relaxing rather than rigid. Nine

steel portal frames span an 18m width, and form window bays 4.5m apart. Outside, the terraces are 3m and 6m deep, and the posts in the balustrade and most of the fencing are 1.5m apart. However, the subliminal rhythm is most noticeable when it is broken. Alternative fencing around the plant sales area – a measure enforced by the tight budget – has the same effect as a note out of tune.

The interior is designed to be as flexible as possible, allowing the shop, cafe and information areas to be easily resized to meet the needs of different visitor groups. Most of the shop fit-out was the work of a retail specialist, although Walters & Cohen did manage to ▶

Floor plan

- 1 Plant room
- 2 WCs
- 3 Office
- 4 Staff area
- 5 Store
- 6 Kitchen
- 7 Servery
- 8 Retail area
- 9 Staff change area





Costs

Total costs (inc external works)	£1,516,100
Area	996m ²
Costs/m ²	£1,293

Breakdown

Substructure	£120,740
Superstructure	£124,805
Timber cladding	£87,306
Glazing	£119,469
Roof finishes	£96,851
Floor	£69,122
M&E	£213,932
External works	£228,135
Fit-out/finishes	£242,292
Preliminaries	£213,448

► design the ticket desk and shop sales desks. The main unit is a clever U-shape which addresses new arrivals on one side and shop customers on the other, allowing a single staff member to serve both at quiet periods.

However, a marching line of supporting posts up the centre adds visual clutter. 'We tried to get a clear span,' Henderson explains. 'But we felt it was more important to have the beam and columns the same dimensions so that they would act as one element.' Instead of a sapling-sized 285mm, the beams would have needed to be a chunky 400mm.

The timber cladding arrived in Wakehurst straight from an episode of an ITV drama. A consignment of afromosia, an endangered African hardwood, had been impounded by HM Customs and donated to Kew. The practice took up the client's suggestion of using it, although creativity was limited by the size of the consignment. As uniform panel widths would have resulted in unusable offcuts, the practice chose two contrasting sizes. 'And if one ever breaks, it will be impossible to replace,' Henderson says.

The retail designer chose display units faced with spring green panels, a colour that adds a slightly sugared artificiality to Walters & Cohen's natural palette. The display panels also breach the architect's 'view corridor' from car

Site plan

- | | |
|------------------------|------------------------|
| 1 Visitor centre | 6 Wakehurst Farm House |
| 2 Service yard | 7 The Stables |
| 3 Millennium Seed Bank | 8 Public toilets |
| 4 Pondfield Cottages | 9 Wakehurst Place |
| 5 Wakehurst Farm | 10 Mansion Pond |

park to gardens. But a most serious challenge to this is its own lighting scheme. Lighting for a forest glade might suggest glow worms and lanterns, but the budget dictated fluorescent tubes. Worse, they are suspended at just the right – or wrong – height to interrupt views.

The lighting must also add to heat build-up in the centre. With no mechanical ventilation, cooling relies on opening the windows and sliding doors to the sun-shaded terraces. In such a building, natural ventilation is probably preferable to the refrigerator chill of air-conditioning. However, on a warm, muggy July afternoon, the temperature was only just on the right side of comfortable. 'Quite hot in that shop,' said one elderly lady on leaving. 'Too hot really,' replied her friend.

They were lucky not to have been rained on as well. When the overcast skies sprinkled warm rain on to the terrace, café users looked up in surprise at the sunscreen they had assumed was a rainscreen. Most made an undignified scramble indoors, but one couple calmly continued to take their afternoon tea, each holding an umbrella aloft.

It was a peculiarly English sight in a perfect English garden, but another reminder that humans might not be as well adapted to forest glades as pied wagtails. Nevertheless, by offering as little interference as possible to the site and the elements, Walters & Cohen's low-slung, low-impact cabin forms an ideal gateway to the gardens themselves. And that has to be the ultimate goal of every visitor centre. ■

Specifications Ironmongery by Allgood (Reader enquiry no 550), resin floor by Altro (no 551), curtain walling by Architectural Aluminium Systems (no 552), sliding doors by Besam (no 552), counter by Durcon (no 553), timber cladding by Henry Venables Interiors (no 554), servery by Lockhart Catering Design Services (555), glazing by Technal (no 556), architectural metalwork by Total Steel Solutions (no 557) For more information on these products, visit www.riba-journal.co.uk/enquiries