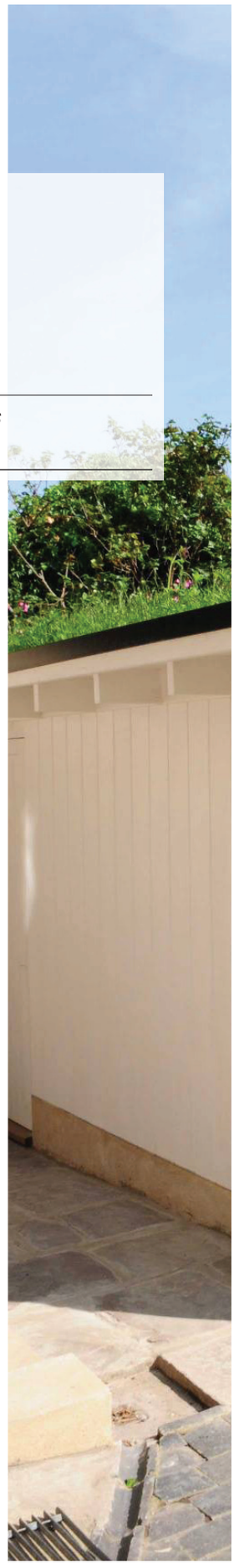
Industry goes wild for soil-less flowers

A Hampshire farmer has created a soil-less wild flower growing system. So why are landscapers, engineers and builders so interested? Stephen Neale investigates



A green revolution is invading the UK's landscape and development sectors. Its success is founded on hard work, dedication and a determination to run a unique and profitable business while offering a solution to a long term problem: ugly urban sprawl and flood risk. If it sounds like a pitch for an appearance on BBC's Dragon's Den, then that is a fair assessment.

Wild Flower Turf is a method of turning buildings or muddied areas into flowering meadows within the space of a few months or even weeks. The company started four years ago, but clients already include national house builders, government agencies, schools, local authorities and even film and stage producers.

"There's so much scope to improve the way people look at architecture, building and design," says Wild Flower Turf's co-founder James Hewetson-Brown, who runs the award winning business from the family's Hampshire farm. "The potential to work more closely with the development sector is huge."

GRASS SEED The Wild Flower story began 46 years ago when James' father set up an arable farm in Winchester, to grow grass seed for animal feed mix. By 1982, the Hewetson-Brown family had begun diversifying into turf production and investigating the potential for soil free growing. "It was ideal because my father was a perfectionist, an essential requirement for getting it rght" said James, who joined his father's business after graduating and working abroad on turf farms. Together they created machines made to their own specification that took over many of the manual processes. These machines helped develop soil-less turf production and new ideas involving civil engineering and urban development. The growing system, believed to be the only turf product of its kind on the market today, involves mixing compost with seed, which is then laid over an impermeable membrane.

HEAVY DUTY NETTING Placing a heavy-duty, civil engineering net inside the growth and then creating a long lasting wild flower mat took some time to develop. The compost sits on the membrane and then the seed mix is watered until germination occurs. The plant roots end up becoming a carpet-like mat material. Once delivered to the customer, the root system grows down into the new ground. Sounds easy, but the process itself is 'fiddly', according to James, because there is so much variation in both the mix and the types of job.

One of the most obvious benefits is that the inbuilt mesh prevents erosion and slippage. Golf course developers and landscapers are among companies taking advantage of the bespoke turf, which can be used to stabilise bunkers and greens. But bigger projects include the Jubilee River Flood Alleviation Scheme, one of the largest riverine barriers ever constructed in the UK.

PREVENT EROSION The Environment Agency created the heavily engineered bank to contain the Thames in case of flood, but it required a layer to prevent erosion. Wild Flower Turf provided both the solution and the picturesque, flowering meadow on the top.

"We grew the turf in heavy, plastic netting that gives the root of the plants greater strength," explained James.

"If this area had just been seeded it would be washed away in a flood. This sort of work is very exciting because it is both profitable and deals with a problem affecting homes and businesses all over the UK. It is also pleasing to be able to offer a product that is rich in biodiversity and beneficial to all sorts of threatened insects like bees and butterflies. It looks lovely too." Parent company, Coronet Turf, designed the erosion control system for use on river banks, which introduced wild flowers into the process in 2005.

DEVELOPMENT SECTOR Wild Flower Turf is working closely with the development sector and house building sector as well. There are opportunities to work at the Olympic site, in Stratford, and Wilson Homes is a client. The company worked with Wilson Homes on a project in Basingstoke two years ago, where disturbance had occurred between a stream and wood where newts were nested. The development, which was to be completed in stages, could only progress to phase two once the newt's area had been reinstated.

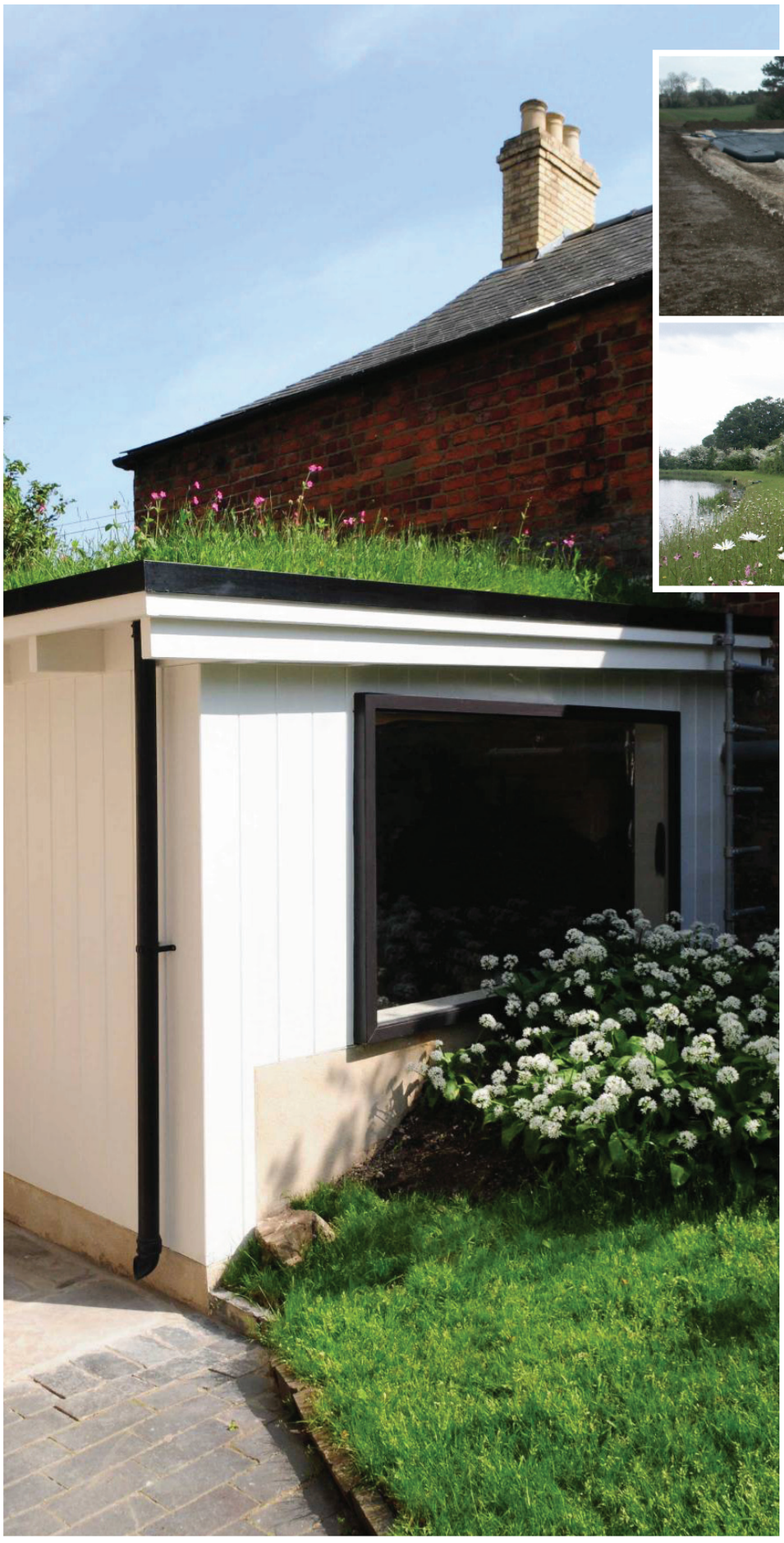
Wild Flower Turf was called in to repair the zone with turf mix specified by English Nature and the Environment Agency. It was agreed that building work would only continue once the turf was long enough to protect the newts from predators.

"We were able to get the job completed in ten weeks," said James. "Compare that with conventional turf, which might take 12 months to grow that long and it shows how quick and versatile our system is."

LONG TERM SAVINGS Although the £9-per-metre turf places it at the costlier end of the market, businesses and even local authorities are fast recognising the long term savings of this unconventional product. Roundabouts in particular are increasingly getting a wild flower make over. The attraction for local government procurement officers is that public spaces covered by Wild Flower Turf only require cutting in the autumn, not every fortnight.

"Roandabouts are a new market," added James. "If you do not have to cut every week there are some significant savings. And the micro climate you are creating expands the biodiversity and setting." While savings is a major incentive, the environmental benefit is significant. Both businesses and customers are increasingly concerned about sustainability.

In 2008, Wild Flower Turf won the Award for the Environmental Innovation and Technology category at the Hampshire and Isle of Wight Sustainable Business Awards.



Clockwise from Left: A Wild Flower Turf roof; Digging the lake in preparation for laying; Year two after laying the turf

Judges were impressed by the uniqueness of the product and its benefits to both clients and the environment.

NO WEEDS The secret to the process is in two parts: creating the turf rolls and then preparing the land. While some of the theory sounds simple, the trick is to get the flowers growing year on year. "That's the part that we found difficult in the development stage," says James. "The skill is in laying something that is pretty in year one, but then doesn't turn to thistle and weeds in year two. To do it over thousands of metres was very difficult.

"Once it's on the soil, as far as the customer is concerned it's really quite easy to manage, with very little maintenance. Most people think the cheapest alternative is always to seed. Seeding can work, but the downside is there's lots of work with maintenance and it can take a long time before you see an end result."

Crops can be tailor-made to suit any theme, from a theatre stage of thistles to a school yard of daisies. "We are not restricted to what we can put in a mix," says James. "We can use 20 or 30 species, there is so much scope. We are experimenting all the time."

GREEN ROOF REVOLUTION? "The green roof revolution is just starting and I think it is going to be very big here," said James. "In London there are areas where whole urban greening is taking place. But Britain is well behind the rest of Europe. If you go across the Channel there are already millions of metres of green roofs. Developers there get huge tax concessions for reinstating the area to its original state, so the most obvious thing to do is put it on the roof. There are no grants or concessions in the UK at the moment. The Government does not provide enough incentives. People won't start whipping the slates of their roofs until it's tried and trusted. But in 20 years, who knows."

BUSINESS EXPANSION The next step into the future is green walls - Wild Flower Turf has worked on near vertical faces in the civil engineering world. James believes in theory he could get his own product running up a skyscraper. "That could be a foretelling of things to come. It's early days for us yet, but I don't see why it would not work. We have come a long way. We're five years into landscaping and 18 months into the roofing," said James. "I'm very excited about what the future holds."