

The biomes of the Eden Project as seen on the descent into the disused quarry where they sit



Lady of the night

Her delicate images of gardens in the night-time have drawn fans from all over the world, including the founder of the Eden Project. **Linda Rutenberg** lets **Jeff Meyer** shadow her and husband Roger on one of her shoots during her stay as artist in residence at the famed conservatory

'**YOU MUST** be Linda's visitor,' says a greying gent in a red sweatshirt, holding open the door amid the drizzle. Inside they all wear red Eden-branded sweatshirts and wellies as they coordinate the exodus of some 6,000 daily visitors from Cornwall's Eden Project, the world's largest conservatory famed for recreating habitats from all over the globe. One man offers a chair; another offers a chocolate bar. I decline. Tonight I am joining Canadian photographer Linda Rutenberg and her husband, Roger, for dinner in their on-site cottage before shadowing them on one of their nightly shoots through the Eden Project's biomes.

A self-dubbed 'Lady of the Night', Linda is riding a wave of interest in her night-time garden photography. This has carried her from North America to England, where she has just concluded a stint as the artist in

residence at Eden. Having been introduced to Eden founder Tim Smit through Peter Gabriel (via a mutual friend and fan of her work) she was offered the opportunity of a lifetime: to come live on site for two months and have total access to its biomes and the verdant gardens within them. Linda also had support from Imaging Expert, which calibrated her monitors and provided her with an Epson Stylus Pro 9900 printer, while Permajet worked with her to find the best paper to bring out her subtle tones. Linda's residency has culminated with an exhibition of about 30 images, Eden at Night, currently on the ground floor of the Core biome until 31 July, comprised entirely of pictures Linda has taken during her stay.

'You're lucky,' says one of the Eden employees as Linda's car pulls up to the lodge. 'Linda's husband is an amazing cook.'



Roger lights from overhead, while Linda takes the picture



A bird of paradise. This was the final image taken on the night



19:00 'Cider, whisky? Glass of wine?' Roger offers. On the hob is a pungent rice dish and a roast chicken that could tempt even a vegetarian. 'Don't be so English,' he says (Roger is originally from Maidstone, Kent), pushing a plate of poppadoms and telling me to make myself at home. In the conservatory of the 400-year-old cottage where they're staying, Linda explains the origins of her ongoing 'At Night' project.

Having spent most of her career as a street photographer, Linda realised a few years ago that she wanted her next project to be something completely different. It was around this time that she also switched to digital, trading her Nikon F100 for a D70. As one not prone to reading manuals, Linda decided to give herself a small project to help her learn how to use her new camera. 'A major theme in all my work is this idea of "transformation." I like to take realistic-looking images and in some manner transform them into something else,' she says. 'Likewise, I've always been intrigued

One of several suggestive images she has captured for her exhibition at Eden, Linda strives to capture soft, muted tones such as in this lily



20:00 After a stunning dinner, we are waiting for nightfall. Linda phones the security lodge to let them know we will be shooting in the Mediterranean biome. She gathers her tripod and Nikon D700 (a recent replacement to her D70) and Roger gathers his Mag-Lite torches. His lighting set-up is simple. Roger carries two to three torches of varying size and intensity. Using some black card he has rolled into a cone, he attaches the wider end to the bulb end of the torch so that the light shines through the narrow hole at the tip of the cone. This concentrates the light, allowing for more targeted illumination of the subject while objects around it remain in darkness, he says. 'The beauty of working in digital now is

by the night. I like the atmosphere of it. I'd worked in b&w for most of my career, but with digital I thought I would try using colour. Because I'd been a street photographer, I'd also shot mostly in cities. One thing I noticed is that we are losing our sense of night-time in urban areas due to all the artificial lighting. I wanted to see if I could find areas in Montreal that still had that sense of mystery about them at night. I wanted to capture a sense of darkness enveloping my subjects.'

Soon after this Linda got a commission to photograph a garden way up in the frigid north of Canada, where snow covers the ground most of the year. It's a unique place, she says, because plants should not grow there. But warm winds that pass through allow many species to survive.

'When I got there the director told me the best light was in the morning and that he would give me a key to let myself in and shoot before the garden formally opened,' she recalls. 'I thought was very gracious, and I said to him, "My husband and I have a Volkswagen camper. Can we park inside and you can just lock us in?" He said sure.

'And then I thought: I'll be in the garden at night. So I asked if he minded if I shot the garden at night, and he said not at all. He even gave me extra torches to use.'

That first night Linda's and Roger's technique was rudimentary. Using duct tape, they fixed three torches to Linda's tripod and wandered around shooting plants and flowers without diffusers or anything. 'Of my first images, many were blasted out by light,' she says. 'But with this crude lighting I got some really interesting pictures.'

With experience the pair has honed their craft. Linda can guess with considerable accuracy what shutter speed will give her the subtle tones she's after, and she can ascertain before shooting whether it's a 'one-light or a two-light job.' Roger, as well, now instinctively knows how long to let his light fall on, under or above a subject to get the muted result Linda is after.

Linda realised after this first garden shoot that she had never seen anything like this before. And from this point her small project snowballed into an opus of career-defining potential that sent her from Montreal, across the United States and now to Cornwall.



Left: Roger lit this lupin from the side, while Linda moved her tripod around to its front to make it appear as if emerging from darkness

Right: Linda takes a slightly wider view to include surrounding flowers

Below left: Because green absorbs more light, Roger has shone the torch on this plant longer than he would others

that I can see the exposures straightaway,' Linda says. 'Getting the perfect exposure is the key to my work. If I can see there's not enough light on one portion of the plant, then I can do it again and change the exposure. I prefer to get it right in-camera. It's only the odd-shot now that Roger and I need more than one try to get right.'

Because she's working with long exposures ranging from 15secs up to 5mins, Linda says it's very important to understand light and be able to predict how an image will look. To help her visualise her pictures, she will walk around a garden (or biome, in this case) in the afternoon to see what's in bloom. Then when she returns at night she has a rough idea of what to look out for. But apart from getting maps and exploring the pathways to get her bearings, that's it.

'Often the things of interest you've noted during the day aren't as interesting at night,' she says. 'Many times it's the mundane subjects that look more appealing. Leaves, for instance, will take on a new colour, or shadows will make a plant appear like an insect. The unfurling of a leaf which no one notices in the day will seem much more beautiful when isolated by darkness. In many ways I feel like the garden is my darkroom and I'm creating these images with light.'



21:00 With only a backpack and tripod, we enter the gate into the Mediterranean biome. Stepping over seedlings, we enter the stillness of a

Cypriot evening. 'I can't tell you how many times we've arrived at the grounds and staff wonder where our strobes are,' Linda jokes. 'They're shocked by the simplicity.'

Placing her bag and tripod on a bench beneath some olive trees, Linda and Roger walk the trail, torches in hand, looking for suitable subjects. A bird of paradise immediately grabs their attention, as does a towering lupin. There are about 12 subjects in total they decide to return to.

'Linda is the person who says I want to take a picture of this and I want to stand here,' says Roger. 'She sees the potential images, and my job is to paint the subject with light and determine the areas that need the most light. Green is always trickiest; you really have to spend time on the green foliage with your torch to bring it out in the image.'

'It's like reciprocity failure,' says Linda. 'You have to compensate for it. Your exposure does not reflect that green absorbs the light so it will always come out underexposed.'

'That's why I normally build up the green first,' Roger continues. 'I start with the surrounding leafage, then maybe light the stalk. Then I may put my light inside the cone and play around with the flower itself. The hardest part is to isolate the flower and keep the light away from everything else. You have to do this whilst moving around so as not to blow out the highlights.'

'That's the secret,' Linda adds. 'I teach this to people, but they will blow out the subject. You have to disperse your light to get an even, subtle exposure.'

Top: A Mag-Lite torch similar to that used by Roger



We're making the rounds. Linda sets up her tripod on the pathway, just a foot or two away from her subjects. Particularly tricky is a bears breech set against a white wall. She's trying for the shadow against the wall, but the bright white is complicating the exposure and Roger's lighting technique. It's the only image so far that they haven't captured on the first or second try.

'The problem with composing these is you don't have a sense of scale,' Linda says. 'You don't know whether you're looking at something small or something large because you don't have anything to compare it to. You're just looking at darkness.'

Generally if it's a flower or tree, she is looking to single out texture or form. Roger will light from the side to accentuate texture, and if he goes in close he will put a tissue over the torch, secured with an elastic band, to diffuse his light. Wider scenes might warrant a more poetic look. Wideangle shots are more complex, however, because they require even longer exposures, sometimes minutes long. And Linda doesn't use a timer – she counts her exposures, as does Roger while he's moving around with his torches.



After the tricky white wall and a reporter accidentally moving the tripod during another shot, Linda and Roger are on a roll. They're moving steadily along.

'The great thing about working in these biomes is that you can take your time and do things properly,' Linda says. Working outside brings all sorts of other obstacles besides the darkness. The slightest breeze, for instance, means you can't get a picture. Keeping things in focus becomes impossible.

Of course, Linda is also benefiting from two lenses on loan from Nikon – a 14–24mm and a 105mm macro. 'They're so sharp,' she says. 'Nikon lent them to me, but I think I'm going to have to grovel because I can't go back and use my old lenses again.'

'With these lenses, especially the wideangle, f/22 makes everything you see sharp,' Roger says. 'I'm not talking about just in focus. It's incredibly sharp. Closing down the aperture to f/22 and using longer exposures we can get crispness we were never able to get before.'

'But I don't use f/22 very often, Roger, except to show the enormity of a space,' Linda counters. 'Normally I use f/8 or f/9, and my exposures are between 30secs and 5mins.' Her exposures are a little longer because she shoots at ISO 320 or 200 to avoid any grain or pixellation.

Linda also says she never used a macro lens for close-ups before she was loaned the 105mm. She prefers getting physically close to her subjects. What's more, she also has her reservations about zoom lenses. 'People rely on zooms too much to see,' she says. 'I like to use a single lens throughout a shoot, ideally at the same focal length, and make myself see things of interest.'

Linda sets up to the side of a lupin, but Roger suggests another angle. Linda moves her tripod around to the front of it and agrees. The curve of the flower head appears to emerge out of darkness. She gets the shot in one try, and everyone agrees it's one of the best shots of the night so far. Now pushing midnight, we go to the final shot: the bird of paradise.

'I've never had two months to just photograph everyday,' Linda says, as she breaks down her tripod after getting her final shot in one go. 'Because I've had such good support from Eden, Imaging Expert, Permajet, Shiraz and others, I've been able to be heavily involved in the production, editing and printing – the whole creative process. It's been a real luxury to have this opportunity where my only responsibility is to create.'

At 10 minutes to midnight my taxi arrives. 'You're just in time, mate,' says the cabbie. 'All the firms stop taking calls at midnight.' The rain has finally stopped. Linda and Roger wave goodbye and drive off into the blue moonlight, which glints off the tops of the biomes at the bottom of the old disused quarry. **AP**

Bottom: This unfurling leaf would not be worth photographing during the day because of a busy background and competing colours, but at night Linda can emphasise its form



DO IT IN DAYLIGHT

THE BEAUTY of Linda's work is that you don't need access to an Eden Project or expensive kit to get great pictures. But what you do need is free time. If you go to work in the morning, have an infant or just happen to live in Iceland where it never gets dark this time of year, finding the time at night to shoot may be your biggest obstacle. Luckily you can achieve the effect of darkness in broad daylight using only an off-camera flash.

You might recall the Inverse Square Law, which states that as light emanates it will spread over an area proportional to the square of the distance from its source. The farther it travels, the weaker it gets – so the closer your subject is to the source, the more intense the light will be. By using an off-camera flash close to your subject in daylight you can trick your camera into exposing for the flash light and underexpose the background. Here's how to do it:

- 1** Set a large aperture of f/32 or f/22 and use the camera's fastest shutter speed – probably about 1/500sec or 1/250sec
- 2** Set your flash to the zoom setting, as a wideangle setting fans more light out onto the background you're trying to underexpose
- 3** Position your flash close to your subject and aim it directly at your flower
- 4** You may get a bit of over exposure in your highlights or your background might not be quite black, but you can usually fix this with a slight Levels or Curves adjustment and some burning. Or, because it really does not take much time, you could just shoot it again!



To see Linda explain her work at the **Eden Project** and for a sneak peek at her exhibition visit <http://www.youtube.com/watch?v=6bYSF7zbpYo>