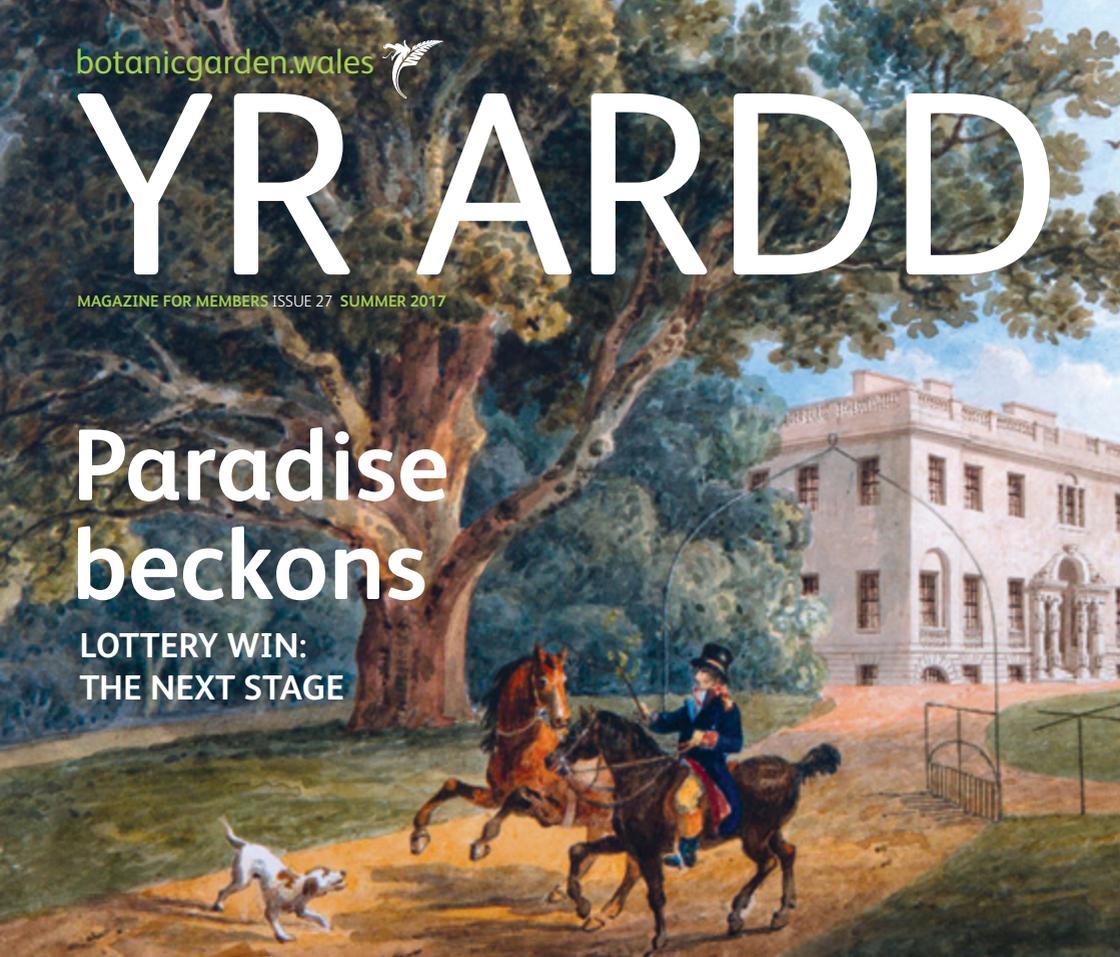


YR ARDD

MAGAZINE FOR MEMBERS ISSUE 27 SUMMER 2017

Paradise beckons

LOTTERY WIN:
THE NEXT STAGE



New attractions for the summer



How volunteers make a difference



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Follow us:   

Verbena, a favourite
in Regency times

Croeso



Conservation, education and inspiration, in action

It is now almost a year since I joined the Garden and it has been an exciting and enjoyable time. There are lots of new faces among our members, too, making up an increase of 16%, so a very special **WELCOME** to everyone who is receiving this magazine for the first time.

During the past year, we received excellent coverage on TV, radio and in the press, and our scientists published research papers in respected journals. The growing number of leisure visitors and 23,000 education visits to the Garden offered us the opportunity to share the great work being done here. As a Botanic Garden we are home to a living collection of rare, endangered and important plants, as well as being a place to enjoy the beauty of the natural world. Our new Curator has brought fresh and innovative ideas to our horticulture team.

Our magnificent Regency Restoration project is now under way – as this special issue will show you. With several other plans for new attractions and investment, I am confident that 2017 will be another great year and we will generate the income necessary to develop the Garden's infrastructure, as well as the horticulture, conservation and research work that our skilled teams carry out.

Let's hope you can visit many times in 2017, to catch the glories of every season. We look forward to welcoming you.

Huw Francis, Director



"It's so rewarding for staff, volunteers and all supporters of the Garden to see our public profile flourishing."

Highlights

Catch up with the news and events in the Garden

HIGHLIGHTS



Wales Wildflower Day

The Garden's wildflower meadows and pastures are a great source of pride to us. Since the turn of the Millennium, we have been managing our Waun Las National Nature Reserve for biodiversity and the results are just stunning.

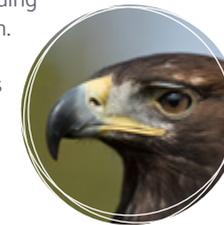
Not only are we seeing annual improvements in the extent and variety of wildflowers, most notably in the thousands of orchids on our hay meadows and rhos pastures, but we're discovering a richer ecosystem of insects, birds, mammals, fungi, amphibians, reptiles, molluscs and all kinds of other species.

Wales Wildflower Day gives us a chance to share our enthusiasm and knowledge. We'll have flower and butterfly guided walks and you can see which moths have been feeding on wildflowers overnight and find out how to make paper out of plants. In our Bee Garden the beekeepers will show how we run our beehives whilst in the Great Glasshouse, you can meet wildflower artists and craftmakers. Bournemouth University's Faculty of Science and Technology will also be here to give children and grown-ups a unique chance to extract their own DNA, play a barcode-matching game and build a bumblebee DNA bracelet. Science with a smile.



British Bird of Prey Centre

There is great excitement in the Garden about a new attraction for 2017 – the British Bird of Prey Centre. All of the UK's native birds of prey – including a barn owl called Orchid (above) and a golden eagle called Midas (below) – will be represented in the new attraction, which is due to open in July. It will be operated by Pembrokeshire Falconry, who are long-standing friends of and regular visitors to the Garden. The Garden will work in close partnership with them to set up plenty of opportunities to see these amazing creatures in action as well as a chance for some special, unforgettable, up-close experiences.



RHS HEART STOPPER

The Garden's exhibit 'All Heart' proved a hit at the RHS Cardiff Show 2017. Designed by Fay Hall, a pulsing, heart-shaped raised bed featured plants that will grow in the new Apothecary Garden, all of them having been used in treating cardiological conditions. An interactive game and selfie opportunity, the 'Apothecary Man' (#Apothecaryman), was much enjoyed by visitors keen to test their knowledge and win a prize.

3 OF THE BEST

Not only are these favourites wildly beautiful but they're part of our heritage too



Greater Butterfly Orchid
Platanthera chlorantha
Flowers: June - July
We get thousands of these flowering beauties in our hay meadows, and we let them set seed before cutting the hay. They are pollinated by moths.



Yellow Rattle
Rhinanthus minor
Flowers: May - August
This plant feeds on grass roots, killing off the big, bulky grasses that used to dominate some of our meadows. The result – more space for wildflowers.



Whorled Caraway
Carum verticillatum
Flowers: late June - August
This county flower of Carmarthenshire is found on old meadows. In summer, one special field in Waun Las turns white with caraway flowers.





Master craftsman

With great sadness we report the death of Les Bryan, who was a loyal friend and supporter of the Garden. So many visitors to the Woodcraft weekends he organised came under his spell, making wooden mushrooms or love tokens, all under his watchful eye. Les's own work survives, in beautiful oak signs for our Waun Las meadows and woods. And in that magical place, Fairy Woods, where children can look for fairy doors and use the postbox he made. Les will be greatly missed.



BBC folk drop by

At our recent Antiques Weekend, we were joined by eager teams spending their precious £300s in the *Bargain Hunt* challenge. There was plenty to choose from, and visitors were delighted to shadow the red and blue teams as they trawled the stands. Presenter Charlie Ross, when he was not posing with delighted *Bargain Hunt* fans, was particularly taken with the paraphernalia in the Apothecary's Hall, the Edwardian pharmacy. He liked not only the story of potions but the details of poisons too!

The *Gardeners' World* cameramen meanwhile got up close to bees and the beekeepers, when Rachel de Thame came to film an item on the Saving Pollinators project, talking to Laura Jones about the foraging habits of honey bees. Rachel loved our Great Glasshouse.



I spy



What does Paul Smith, our new Education Development Manager, bring to the Garden? Well, he has already brought in 10 trebuchets – catapults – which families used during half-term activities, his telescopes for stargazing, and special Coronado solar telescopes which came in very handy for sun-watching one glorious day. Can you guess from all that what his specialisms are? His subjects are physics and chemistry, but he's passionate about astronomy too. And, when he's not standing still and gazing at the stars, he's on two wheels, repairing or hiring bicycles in the business he runs, Towy Valley Cycles. He lives in Llandybie with his wife and three children, who all really enjoy Dad's new job at the Garden. Paul has plans to expand education provision in the Garden so that other sciences can be included in the activities offered.



Adventures for all ages

So that includes you, Dad! Father's Day will be just one of the days when visitors to the Garden can have a go at a new experience such as archery, bushcraft, tree-climbing or abseiling. Behind the Science building, for example, intrepid helmet-wearers will be learning how to descend safely. Local experts from Hawk Adventures will be offering these alternative activities, for anyone big enough to wear the safety helmets, and judging by the popularity of the first days offered, it would be wise for visitors to sign up early in the day for a session of abseiling, to avoid disappointment. Look out for regular adventure days in the school holidays every Tuesday and Wednesday.

Events

For full listings, take home or download our events leaflet at botanicgarden.wales/visit/whats-on/upcoming-events/

GOOD ENOUGH TO EAT



Sheryl Richardson shakes up her salad this year



In the 'Growing the Future' garden this year we are experimenting with chickpea 'Principe' (*Cicer arietinum*). Chickpeas have been cultivated since ancient times in areas around the Mediterranean, North Africa and India and are increasingly popular in contemporary cooking.

Buying: Seeds are available from Chiltern Seeds.

Growing: We sowed the chickpeas in April in our polytunnel, using a hot bench for germination.

Eating: Although we don't expect to be making our own hummus from the crop, we are hoping to pick the immature pods for eating. Pods can be eaten raw, making a tasty and interesting addition to summer salads.

Regaining Paradise

Landscape as art to take your breath away

'Enchantingly romantic' is how a visiting family described the wonderful parkland at Middleton Hall in 1813. With its lakes, waterfalls, lush garden walks and shady woods, William Paxton's great estate filled his guests with awe and wonder.



Now that grants of more than £7 million from the Heritage Lottery Fund and others have been secured, work is under way to restore that glory. It will be thrilling to see the stunning parkland recreated, and paradise regained.

Project manager, **Helen John**, can scarcely contain her excitement as work progresses. She will oversee the whole development, from the clearing of scrub to the reinstating of dams and intricate bridges. What will make it all possible? Twelve different funders, the skill, knowledge and experience of numerous experts – from archaeologists to engineers – as well as the contribution of hundreds of volunteers. All will play a vital part in this story of regeneration.



How fortunate it is that seven of the 14 watercolours painted by Thomas Hornor in 1815 are available as our blueprint with the kind permission of the Grant family.



MILESTONES



The Middleton brothers are among the founders of the East India Company. They build a mansion in Llanarthne around **1600** with the fortune they have gained trading in exotic plants. Spices such as nutmeg have immense value due to their real and imagined healing properties at a time of returning plagues.



Born in **1744**, Sir William Paxton is a self-made man who joined the navy at the age of twelve. In **1789** he buys Middleton Estate for about £40,000. Around **1795** a new Hall is designed and built, with one of the finest Regency parklands in Britain.



The National Botanic Garden of Wales opens in **May 2000**, with Lord Foster's Great Glasshouse as its centrepiece. In **2014** the first stage of Lottery funding is secured to restore this stunning Picturesque landscape, and in **2017** funding for the whole project is awarded.

'AS IF MADE BY FAERIES'

A visit to Middleton Hall and its parkland was an immersive experience, designed to impress as well as to provide enjoyment for Sir William Paxton's guests. Its design was at the cutting edge of the late 18th-century creation of landscapes as art, combining the gentle rolling hills and placid waters of a Romantic landscape with the awe-inspiring power of nature in the Picturesque style. Designed to be explored along a series of sinuous paths and carriage drives, the landscape was made up to form a sequence of views and vistas deliberately hidden and then dramatically revealed as visitors passed through it. At every turn, a new sight or sound would assault the senses of Paxton's guests, from the roar and crash of a thundering waterfall to the peace and serenity of a wooded glade "as if made by faeries".

Dominated first by his mansion, which burnt down in 1931, and then later by the tower which was his tribute to Lord Nelson and came to carry his name, Paxton's landscape has most recently been re-purposed through the creation of the National Botanic Garden of Wales. Taking the place of the mansion, Sir Norman Foster's Great Glasshouse has now become the focus not only of the modern 21st-century Garden but also Paxton's Regency landscape.

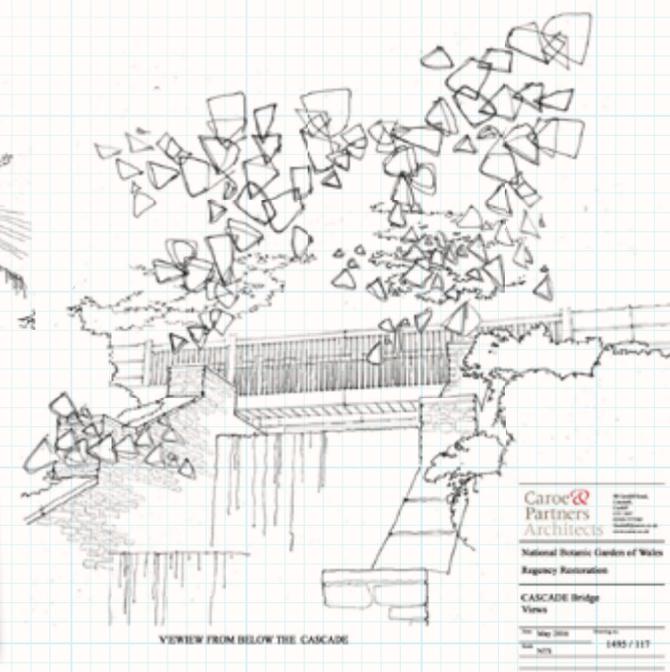
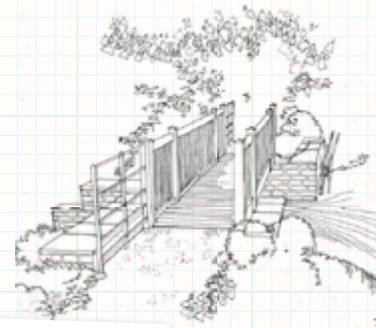
We are just starting the restoration process which will bring back the lakes, waterfalls and cascades, historic routes, bridges and parkland trees, re-instating and re-focussing all of the 568 acres of this remarkable historic landscape for the enjoyment of its visitors.

FROM RESEARCH TO ACTION

Over the last two years our project Design Team has studied and explored what makes this landscape special. There have been investigations not only of its history and archaeology, its past environments and its past management but also of the plants and animals that live in it now. All this information has helped to design a detailed restoration and conservation plan for our historic parkland.

We have topographic surveys, archaeological investigations, ecological surveys and geotechnical ground investigations. There have been Conservation and Maintenance and Management Plans created, engineering drawings produced and new bridges designed.

The next stage will be to start to clear trees and scrub from overgrown features such as the dams and lakes so that they can be repaired and re-instated. Alongside this work will be a programme of activities, events as well as a whole host of volunteering and heritage training opportunities for our visitors.



FROM VISION TO NUTS AND BOLTS

There are two key companies working in partnership on the project, namely Mann Williams, Civil and Structural Engineers and the Nicholas Pearson Partnership, Landscape Architects. They are entrusted with an immensely ambitious undertaking: to recreate a paradise.

Tom Hill, the chief structural engineer, says: 'The Regency Restoration Project represents a tremendous design challenge and opportunity in equal measure. From a professional perspective, the project affords a once in a lifetime opportunity, and naturally the whole team is tremendously excited at the prospect of delivering the restoration of this stunning landscape for the Garden. It will call for an extraordinary combination of engineering elements: the reinstatement of three reservoirs with associated dams and control features, cascades, a waterfall and multiple bridges of varying aesthetic, all set within a landscape that resonates with historical significance.'



Above: Architect's drawing of the cascade bridge. There are regular guided tours of the parkland – look for details in the events booklet and on line. Left: Schoolchildren learn about building dams.



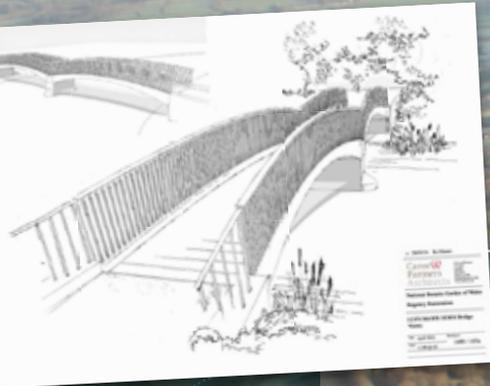
THE FAMILY HISTORIES JIGSAW

The researchers who have been avidly assembling the histories of those who lived on the Middleton estate over the years have unearthed real treasures, to be shared in future issues of this magazine. Meanwhile, how lovely that twins Giorgio & Luciana visited in the spring – their great-grandfather, Gwilym Isaac, lived at Y Graig farmhouse, which is now the home of the horticultural team.



View from the cockpit

Perspective and vision came together when Heritage Officer **Louise Austin** took to the skies and looked down on the wonderful set for this project.



6 bridges to be built.

2 more fabulous lakes to be restored to complete the necklace of lakes around the site of Paxton's mansion.



"A circle of landscapes so sublime in its general effect, and so pleasingly varied in detail must defy the happiest efforts of the pen or pencil ..."

Thomas Hornor, 1815



80,000

The amount of water (in cubic metres) to be contained in the restored lakes.

Paxton's Tower

Historic parkland border

LLYN FELIN GÂT

LLYN MAWR

Site of Middleton Hall

LLYN CANOL

5 km of historic paths to be re-instated for Garden visitors to enjoy the parkland as Paxton's guests did.

568

acres of managed parkland to be explored.

3,000

trees to be planted. Below: volunteers planting trees to create new habitat for dormice.



300

volunteering and training opportunities. Above: volunteers excavating at the Grotto of Hygiea - shown in its former glory in small Hornor painting on p 8.



WHY NOT GET INVOLVED? From archaeology to the history of maids and servants, from tree planting to Regency tea-parties, there's so much to enjoy. Contact Louise Austin (louise.austin@gardenofwales.org.uk 01558 667178), sign up for the newsletter, and visit our heritage blog botanicgarden.wales/blogs/heritage/

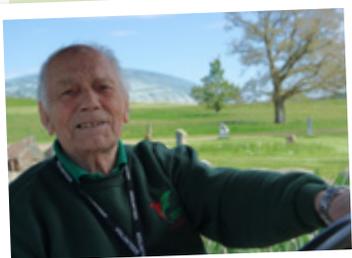


Members' patch

Make the most of your membership – not just free entry but discounted courses, free admission to other gardens and lots of opportunities to meet garden-lovers of all ages

OH, TO DRIVE A BUGGY!

Go on, admit it: you'd love to tootle around on a buggy, saving weary walkers and damsels in distress. But it's not all glamour. Stan McHale, one of the volunteers entrusted with ferrying visitors around the Garden, will tell you that two important qualities in a buggy driver are patience and reliability. He can take up to five passengers at a time, and always gives priority to people with walking difficulties, so the elderly or infirm can ride in style.



Stan has volunteered at the Garden for some 15 years and considers it to be a precious part of his life. He's no stranger to volunteering, having been a voluntary fire officer when he lived in Windsor, where he enjoyed the camaraderie and team spirit. And so it is in the Garden. What's the most unusual sighting for Stan? Two of the Beverley Sisters arrived one day, dressed in identical, colourful plumage. Did they ride on the buggy? Unfortunately not.



Second time around for books

The Garden's Bookstore continues to thrive, with no shortage of stock. Hugely supportive members and volunteers are passing on their good reads, on a wide variety of subjects. Volunteer Maud Jones says that good quality paperbacks and modern books in good condition are most welcome, and Welsh language books are selling particularly well. In stock at the time of writing were *The First World War* by John Keegan and *Heartstone* by C J Sansom. You see, you really must call in to seize a treasure.

The bookstore is located near the Garden's main entrance, by the bus stop. That makes it ideal for a browse before serious Garden walking or, indeed, afterwards, with a cuppa stop in Y Pot Blodyn coffee shop, so you can get started on that book.

Volunteers Maud and Lynne at work



TALKS AND TRIPS



June 16: It's off to magnificent Raglan Castle, to wander the Tudor/Stuart gardens, guided by Garden trustee Dr Liz Whittle.

July 21: Dr Michael Leach shows us fabulous wildlife photography

September 23: We're off to the RHS Malvern Show

October 20: Apples – the Heritage Orchard Team show us how it's best done

For times, venues, cost of trips or to book places, contact Jane Down. jane.down@gardenofwales.org.uk



Stitching Botanicals

The talented Stitching Botanicals meet up twice a month in the Garden and continue to produce outstanding work. Earlier this year, members made wonderful larger-than-life creatures that are native to each of the six geographical areas represented inside the Great Glasshouse. By Easter they were in place, ready for children to find on an alternative Easter hunt. The South African rock lizard pictured here lives on rocky mountainous outcrops. The heads of males turn blue in the breeding season so the one created by stitcher Pat James is clearly ready for the ladies. Other creatures made were a hummingbird, a yucca moth, a scorpion, a Canary blue butterfly, and honey possums.



Meet a member

SUSAN DAVIES

Back in 2000, Susan bought life membership for her family, and she's also a hardworking volunteer herself. Every Tuesday she comes to work on the archives, unearthing all sorts of material about the Middleton estate. Particular projects such as the Middleton Dig of 2012 proved fascinating. When she grouped treasures like a bit of roof tile, a fragment of glassware and a painted ceramic, then the story of the house and home really came to life. And these days exciting research continues for the Regency Restoration project.

Favourite parts of the Garden:

- Flower meadows in summer
- The Great Glasshouse – "you can't beat that warmth and light on a wet February afternoon"

Favourite events:

- With her grandson, meeting meerkats and enjoying Welly Wednesdays



A photograph showing three generations of a family participating in a conservation activity in a forest. An older woman in a white sweater and glasses stands in the background, looking down at a young girl in a pink snowsuit. A woman in a grey jacket and blue boots is kneeling in the foreground, pouring soil from a blue bucket. A young boy in a blue jacket and green hard hat is kneeling next to a black bucket filled with soil. All three children have name tags. The ground is covered with fallen leaves and soil.

Three generations of the descendants of James Grier, Paxton's estate manager, volunteer with the project.

diolch

DID YOU KNOW ... that your visit to the National Botanic Garden of Wales helps us in our mission to conserve some of the world's rarest and most endangered plants and helps preserve pollinators so that food can grow?

Now that our Regency Restoration project has received the go-ahead, you are also helping to safeguard one of Britain's finest waterparks for future generations. **THANK YOU.**