

**Professional Gardeners' Guild (PGG) Trainee Study Trip
to the Algarve, Portugal**

March/ April 2019

Alison Barnard (2nd year PGG Trainee and Merlin 756)



Contents

Introduction.....	page 4
Diary.....	page 5
Conclusion.....	page 18
Acknowledgements.....	page 18
Finance Report.....	page 19

Introduction

A second year horticultural trainee on the Professional Gardeners' Guild (PGG) traineeship, I was given the opportunity to visit Portugal on a study trip in March 2019 with three fellow PGG trainees. The first week of the trip was spent at Sintra working at the Palace and Gardens of Monserrate, part of Parques de Sintra, which became listed as a UNESCO Cultural Heritage Site in 1995.

The second week of the trip, generously funded by the Merlin Trust and subsidised by the Mediterranean Gardening Association Portugal (MGAP), was to the Algarve to attend the MGAP Pre-Conference Tour. This provided myself and my fellow trainees with an opportunity to learn more about Mediterranean gardening, illustrated by visits to gardens within the three different ecological areas of the Algarve (Serra, Barrocal and Litoral), as well as to meet people from around the world with a shared interest in Mediterranean gardening and to hear about their experiences of gardening where they live. The Mediterranean Gardening Association is an international organisation made up of a group of people with a shared interest in Mediterranean horticulture who want to promote and share knowledge of Mediterranean plants and gardening, particularly in climates relevant to this area of gardening.

Sunday 31 March 2019

We arrived at The Holiday Inn, Armação de Pera, our base for the week, the previous day having travelled from Sintra to Lisbon and then onto Tunes, Algarve, by rail.

Our hosts for the week, Rosie and Rob Peddle, who help run the Mediterranean Gardening Association Portugal (MGAP), met us at our hotel in the morning. We introduced ourselves and Rosie and Rob told us about their involvement in the MGAP over coffee. Rosie had been a volunteer with Plant Heritage back in the UK and having enjoyed many holidays in Portugal over the years admiring the local flora, decided with her husband, Rob, to relocate to the Algarve. Their latest project is the Barrocal Botanic Garden based at the Quinta da Figueirinha, Silves. Rosie explained that the Barrocal, located in the South-West of the Iberian Peninsula, is one of the three ecological areas of the Algarve (Serra, Barrocal and Litoral). The Serra is the mountainous region, in particular the Monchique district, known for *Quercus suber* (Cork Tree), the national tree of Portugal. The Barrocal (meaning 'Barro' Clay and 'cal' Chalk to describe the soil type) has the most distinct plant community and is a well-known biodiversity hotspot. The area runs along the Algarve from Cape St Vincent to Castro Marim and sits between the Serra, the mountainous region, and the coastal strip (the Litoral). The Litoral contains plants suited to coastal conditions from small bulb plants to *Cistus* spp. and *Pinus* spp.

The aims of the Barrocal Botanic Garden include:-

- 'To demonstrate to professionals and amateurs involved in horticulture, design and research the enormous potential of the native plants of the Barrocal zones.
- To provide a resource for training and demonstrating to those (and especially those embarking on their careers) in the gardening/ landscaping/ horticultural industries the benefits of using native plants.
- To provide a major aid to developing existing and future links to Government, academic and training institutions where teaching, research and practice combine to pass up-to-date knowledge onto the next generation.
- To demonstrate the use of native plants to deliver beauty and diversity with minimum interventions and low to nil water use – restoration ecology is just like gardening, a process not a product.
- To engage all ages and nationalities in the life of the garden, throughout the year and in all seasons, through various activities including workshops, planting and open days and identification sessions.'¹

Covering an area of 1000 square metres, the garden site was abandoned land for many years. This allowed native plants to flourish as well as the carob, almond and olive trees typical of the Barrocal. Surveys of the wide variety of existing plants on the land were carried out as a starting point, and planting began in February 2017 to include other natives found in the Barrocal but not represented in the garden. Still in the early stages of development the garden is an ongoing project.

Rosie and Rob took us to the Botanic Garden, telling us about the various orange, avocado and olive plantations we passed on the journey. The soil in the area is rich

¹ Barrocal Botanic Garden leaflet

in iron, which the orange trees favour (and gives the soil its red colour), and the irrigation systems supplied to them are inserted with nitric acid. Dams and reservoirs have been created to promote the agricultural industry in the Algarve, although this supply comes at a price. One of the main considerations of gardening in the Mediterranean that we had to process, was that the gardening season runs from November to March/April, with the dormant season being the hot summer months when there can be no rain for several months; the opposite of the gardening year in the UK.

On arrival at the Quinta da Figueirinha the smell of orange blossom filled the air and is one of my lasting memories of the Botanic Garden. We gathered tools near the entrance including wheelbarrows, rakes and shovels as we were going to be helping out in the garden for the day. During our walk to the Botanic Garden, past the land designated for experimental gardens at the Quinta including future allotments and school gardens, Rosie pointed out various native plants of interest. She explained that the Botanic Garden is set out in zones to demonstrate different growing environments to visitors and particularly encourage local visitors to grow native species in their own gardens. Zones are as follows:-

- **Zone 1** represents low-growing species with full sun exposure and near to pathways including plants such as *Arisarum vulgare*, *Centaurium erythrea*, *Helichrysum stoechas* and *Muscari comosum*.
- **Zone 2** represents low level shrubs and sub-shrubs in a woodland edge environment with plants including *Cistus albidus*, *Daphne gnidium* and *Genista hirsuta* subsp. *hirsuta* and *Jasminum fruticans*.
- **Zone 3** represents shade or part shade loving plants near to larger established groups of woody plants including evergreen shrubs, native palms and shade loving ground covers. Plants represented included *Arbutus unedo*, *Ceratonia siliqua*, *Euphorbia segetalis* and *Phillyrea angustifolia*.²



Zone 3 of the Barrocal Botanic Garden

Rosie explained that there were no formal irrigation systems at the Botanic Garden. Plants are planted deep in the soil with a 'bowl' created around their base. Water is directed into the bowl to encourage it to filter down directly to the roots of the plant and new plantings are mulched with chipped pruning debris from the garden to help

² Information taken from Barrocal Botanic Garden leaflet – March 2019

the soil retain moisture. The key to Mediterranean gardening is to encourage roots to go down into the ground to search for water rather than relying on water from above. This is ultimately what allows them to be self-sustaining once the initial establishment phase after planting is complete. Our task for the day was to water new plantings including *Punica granatum* (pomegranate) and *Phillyrea angustifolia* (false olive) and cover their bases with mulch.



Watering new plantings using a hose – holding the hose above ground to avoid damaging small plants.



A 'bowl' created around the base of new plantings to direct water to the roots.



Chipped pruning debris from the garden used as a mulch around the base of new plantings to aid moisture retention.

Rosie pointed out various native plants to us during our visit to the Botanic Garden some of which are illustrated below.

Scilla peruviana (portuguese squill or cuban lily)



Found in Zone 1 of the Barrocal Botanic Garden. A species of *Scilla* native to the western Mediterranean region in Iberia, Italy and northwest Africa. Although not of Peruvian origin, the name 'peruviana' is derived from the name of the boat the bulb was transported in called 'The Peru'. A bulb-bearing herbaceous perennial of the Asparagaceae family that grows to 12 – 20 inches tall, has long, strap-like leaves and flowerheads made of star-like florets on 6 – 12 inch stems, it grows best in a well-drained soil with a sandy or gritty texture in full sun or partial shade.

Coronilla valentina* subsp. *glauca (scorpion vetch)



Found in Zone 2 of the Barrocal Botanic Garden. A species in the legume family Fabaceae, native to Portugal, Spain, Malta and Croatia. An evergreen shrub which

grows to 80cm in height and width with vetch-like leaves and fragrant bright yellow flowers in spring and summer, followed by slim pods. It grows best in well-drained, sunny positions.

***Ceratonia siliqua* (carob)**



Found in Zone 3 of the Barrocal Botanic Garden. A flowering evergreen tree in the Fabaceae family, which is widely cultivated for its edible pods and as an ornamental tree in gardens and landscapes. Native to the Mediterranean region, the ripe pod is often ground into carob powder, which can be used as an alternative to cocoa powder. Seeds are harvested in August when the pods go black, and are naturally sweet. The seeds are uniform in size and weight and are the origin of weighing gold in carots. The Carob tree grows up to 15 metres in height with a broad crown. They prefer well-drained, sandy soils and can tolerate long periods of drought but need a certain amount of rainfall per year in order to produce fruit.

Other plants included *Offris speculum*, *Anacamptis pyramidalis* (both wild orchids), *Genista hirsuta algarvensis*, *Lavendula stoechas*, *Phlomis purpurea*, *Cistus monspeliensis*, *Pistachia lentiscus* and *Gladiolus illyricus*.

Monday 1 April 2019

Following a day of exploring the area around the hotel we met the Pre-tour Conference group for welcome drinks and dinner in the evening at the hotel. Mediterranean gardening association members were represented from America, Chile, South Africa, France and the UK. Following dinner we were given a briefing on the schedule for the next few days.

Tuesday 2 April 2019

We were met at the coach first thing in the morning by our tour guide for today, Marilyn Medina Ribeiro. A British garden designer, Marilyn has a background in graphic design and landscape management alongside ten years' experience of

building and maintaining drought-tolerant landscapes in a variety of locations and conditions in the Algarve. She is the owner of Waterwise Gardens, a company which provides consultancy, design, construction and maintenance services. The three gardens we were to visit today were all owned by Marilyn's previous clients.

Our first visit of the day was to a private garden, which Marilyn had worked on at Carvoeiro, Lagoa. She had been approached by the owners who were looking for a way to reduce their increasing water bills and create a self-sustaining Mediterranean garden. Marilyn's ethos is to work with the soil as it is and to use plants that suit the environment rather than to try to force plants to grow in unsuitable conditions. She does not use compost or fertiliser to establish plants unless a quicker impact is required. When used, she will add a balanced nutrient slow-release fertiliser, but prefers to let the plants adapt naturally to their surroundings. Watering new plantings is only necessary during the first couple of years of establishment and then after that they should be largely self-sufficient apart from the usual annual pruning routines.

The garden at the front of the house consisted of gravel mulched beds with plants such as *Echium fastuosum*, *Salvia africana-lutea* and species of *Tulbaghia* sp. and *Callistemon* sp.



Front garden



Front garden – *Echium fastuosum*

A path led through to the back garden which contained a small lawn and swimming pool with further beds consisting of *Agave* spp., *Sedum* spp., *Aeonium* spp. and *Euphorbia* spp.



Back garden with *Euphorbia* spp.



Back garden – *Euphorbia* sp. and *Cyperis* sp.

Beyond the formal beds of the back garden was a native wildflower meadow containing plants such as *Serapias lingua* (tongue-orchid), *Scilla peruviana* and *Trifolium stellatum*.



Native wildflower meadow



Trifolium stellatum

From here we went on to Quinta do Vale da Lama, Lagos, a working permaculture farm as well as an eco-resort offering bed and breakfast accommodation and retreats, courses and school visits. A not-for-profit organisation, it is open to the public in July and August. Marilyn had been approached to work on the garden immediately surrounding the homestead on the land with the aim of keeping the eye-catching views of the Alvor estuary and surrounding landscape, while at the same time creating a sense of privacy without disconnecting from the farm in its entirety. Surrounding the garden is a loose hedge of native plants creating a feeling of enclosure and within this are crushed stone paths and beds of naturalistic planting that fit comfortably with the views of the landscape beyond. Plants here include *Euphorbia segutalis*, *Gaura* sp. and *Echium* sp.



Quinta do Vale da Lama



Beds surrounding the homestead



Echium sp. and *Euphorbia* sp.



Gaura sp.

Closer to the house there is a kitchen garden and succulent plants as well as climbing plants such as *Passiflora x violacea*. As well as sourcing irrigation from a bore hole, well and reservoir, greywater irrigation is used which recycles waste water from the house via a junction box which allows water to be sent directly to the roots of plants that have the biggest requirement.



Passiflora x violacea

Making our way up into the Monchique region, we stopped for lunch at a restaurant. Our next visit was another client of Marilyn's, whose home was only a short walk away. Set on a slope high in the Monchique mountains with stunning views and a forest of *Quercus suber* (cork oak) surrounding them. Marilyn was approached originally to work on the long border alongside the house but then returned to create an Islamic-style rill and herb garden as well as perennial and shrub borders of Mediterranean plants.



Islamic-style rill



Beds with a view of the Monchique region



Herbaceous and shrub borders



Herbaceous and shrub borders

Before heading back to the hotel we went to the Fóia viewpoint, the highest point in the Monchique district rising 902 metres above sea level. Due to the weather conditions that day, the view was largely misty but on a clear day it is possible to see the southern coastline from Faro to Cape St Vincent. Although the land at the highest point appears quite barren, native plants such as wild *Paeonia* spp. and *Rhododendron ponticum* can be identified in the area.



Fóia viewpoint

Wednesday 3 April 2019

Today we travelled to Carrascalhino, Aljezur to visit the native forestry project of Udo and Claudia Schwarzer. A Biologist and Landscape Architect respectively, the couple own a company called Piscinas Biológicas where they provide a service creating natural swimming pools for clients across Portugal. Alongside this, their environmental interest has also led them to work for a client who wanted to replace a plantation of *Eucalyptus globulus* trees with a natural forest. Work was undertaken to remove the *E. globulus* whilst care was taken to avoid damaging the young *Quercus suber* (cork oak) seedlings as well as other *Quercus* species. No new plantings have been made to the forest apart from a few *Cistus* spp. cuttings, otherwise all other plants are natural with many hybrids developing, or naturally planted by Jays moving acorns around the forest. Udo and Claudia's philosophy is to allow the forest canopy to develop without intervention, despite the risk of losing biodiversity.



Carrascalhino, Aljezur – the remainder of the Eucalyptus plantation can be seen in the background.



Carrascalhino, Aljezur



A natural swimming pool as designed and built by Claudia and Udo Schwarzer.

Plants identified during our guided walk included *Euphorbia paniculata*, a Monchique variety; *Cistus* spp. and *Epipactus* spp. (terrestrial orchid), both indicators of a *Quercus suber* forest; *Arbutus unedo*, *Cistus bifolia*, *C. crispus*, *C. lusitanicus*; an insectivorous plant which is a sign of no winter (indication of the warmth of South West Portugal) and a green *Lavandula* sp., which is a sign of humidity and nearby water courses.



A green form of *Lavandula* sp., which is a sign of humidity and nearby water courses.



Cistus sp.

Following lunch at a nearby restaurant, our next visit was to the Ribat of Arrifana for a guided walk led by Udo and Claudia along the [Rota Vicentina](#), a well-known coastal walking area in South West Portugal.



View along the Rota Vicentina

Udo explained to us that wind and sand were the two main environmental elements that plants had to contend with growing near the coast. Although there are fairly consistent coastal weather conditions across the year in South West Portugal, different plants will be seen growing in different areas of the coast-line depending on whether the conditions are sheltered or exposed. Our walk started along an exposed piece of coast-line and plants were identified such as small bulbs including *Galanthus* spp., *Antirrhinum* spp., *Teucrium baccatum*, *Biscotella sempervirens* and *Armeria maritima*. Exposure to the elements causes plants to adapt for survival, adopting bushy habits and vegetation will interlock to create a ground cover able to withstand strong winds, e.g. the wind prevents Mediterranean Juniper from becoming a large plant.

As our walk progressed into a more sheltered area, the plants began to change to taller specimens of *Pinus* sp. and *Phillyrea* sp. with bushland progressing into woodland.



Cliff-top plants in an exposed area



Moving to the taller plants of a more sheltered area



Carpobrotus edulis (highway ice plant)



Parasitic plant often found on *Cistus* spp.



Euphorbia paniculata subsp. *monchiquensis*

Thursday 4 April 2019

The last day of the Pre-Conference Tour, today's first visit took us to a private garden not far from Silves belonging to a British couple, who had been working on the garden since 2008. Apart from the hard-landscaping around the house, the garden was laid to lawn when they arrived. Their first step was to begin removing the lawn by laying down weed-matting, using weed killer and contracting a landscaper to lift turf. During the lawn removal, rocks were dug out and used to build raised beds, edge beds and create a rockery. The garden is now made up of informally laid out beds with gravel paths running through them, and a vegetable/ herb garden, which is the only area supplied with formal irrigation. Succulents in pots are decorative on the patio, *Wisteria* sp. climbs over a pergola and *Bougainvillea* sp. provides a stunning splash of intense hot pink spilling over a wall. In terms of maintenance only tree work is contracted out, with the vegetable garden being the most labour intensive area for the couple. This garden was my favourite of all our visits over the last few days. As

a keen kitchen gardener, I wonder whether this aspect swayed my interest, but there was also an atmosphere of calm about the garden, which I loved, maybe a feeling of the garden being cared for but not too formal, a relaxing homely feel with complementary colour schemes and contrasting textures and shapes; basically a garden I could imagine myself owning and enjoying. Plants identified during our visit included *Citrofortunella x floridana* (limequat), a hybrid between key lime and Kumquat, *Senna didymobotrya* (peanut butter tree), and *Plectranthus* sp.



Gravel beds and paths



Kitchen garden



Kitchen garden



Citrofortunella x floridana



Rocks extracted from the ground when the lawn was removed, used to edge beds.



Wisteria sp. covers a pergola



Bougainvillea sp.



An attractive way to display succulents

Our next visit was to the Barrocal Botanic Garden at the Quinta da Figueirinha, Silves. Guided by Rosie Peddle, this was my and the other trainees' second visit to the garden and it was great to be able to spend more time there, this time, having already had an introductory tour a week before, being able to soak up the atmosphere a bit more and pick up other new bits of information about the garden and its plants.

Conclusion

My knowledge and appreciation for Mediterranean gardening increased significantly during our trip to Portugal, and I have hugely enjoyed the visits to view Mediterranean plants in different environments. I have learned a huge amount and probably the most prominent aspects are the importance of conserving water and creating gardens using plants most suited to the conditions of an area. The promotion of native plants and encouraging biodiversity is fascinating, as is seeing how plants adapt to their conditions, illustrated by our visit to the South West coast of Portugal. All in all the trip has been very thought-provoking especially with warmer conditions prevailing for longer periods of time in the UK and the idea of adapting Mediterranean gardening to the UK is an interesting consideration.

Acknowledgements

I would like to thank a number of people for their contribution in the organisation of the last week of our PGG trip, including John Humphris and the PGG for enabling us to go on this study trip and the Merlin Trust for their generous funding of the second week. Rosie and Rob Peddle for welcoming us onto the Pre-Conference Tour and for being so kind and inspirational, to Marilyn Medina Ribeiro for her guidance and company during the week and our fellow Pre-Conference Tour delegates, who it was a pleasure to meet and share the experience alongside.

Finance report

Costs (£)	Notes
373.56	Mediterranean Gardening Association Portugal Pre-tour conference fee (01 - 04/04/19)
1.95	(2.25E) Rail travel from Sintra to Lisbon (30/04/19)
3.42	(3.95E) Lunch at Pizza Hut (Shopping centre in Lisbon) (30/04/19)
18.11	(20.90E) Rail travel from Lisbon to Tunes, Algarve (30/04/19)
3.47	(4.00E) Toasted cheese sandwich at Holiday Inn, Algarve (04/04/19)
£400.51	

The award received from The Merlin Trust was for £400.