

Whatever your garden might mean to you there will be something here in the SA Water Mediterranean Garden that strikes a chord. This garden has been designed to show how water-efficient plants can help to create the garden you want, whatever that might be.

There are more than 130 plant species around you that have been selected to provide an intriguing display of geographical, physical and evolutionary variety. Note the names of the plants that interest you so that you can

> Making the most of the SA Water Mediterranean Garden

When deciding which mediterranean plants to include in your garden, consider whether they have potential to become weeds, particularly if you live near native bushland, farmland or a waterway.

plants is a great start.

But gardening in a dry place can use up a lot of resources. About 40 per cent of Adelaide's household water goes on our gardens. You can reduce this amount by using a water-wise gardening approach. Choosing mediterranean

And then there is the blood, sweat and tears.

landscaping, retail nursery, garden supplies and hardware.

Adelaide is a great place for gardening. South Australians spend around \$400m each year on our gardens –

> Gardens – a significant investment

SA Water encourages the sustainable use of water. The SA Water Mediterranean Garden is a practical example of water being used wisely and well, both as a design feature and the critical factor in the choice of plants.

> SA Water's involvement

“Remain true to the earth.” Friedrich Nietzsche



Welcome to the SA Water Mediterranean Garden

Showcasing the diversity, resilience and beauty of mediterranean plants



Botanic Gardens of Adelaide

North Terrace Adelaide
South Australia 5000
Telephone +61 (0) 8 8222 9311
Fascimile +61 (0) 8 8222 9399
E-mail botanicgardens@botanicgardens.sa.gov.au
Web www.botanicgardens.sa.gov.au

SA Water

77 Grenfell Street Adelaide
South Australia 5000
Telephone 1300 650 950
E-mail customerservice@sawater.com.au
Web www.sawater.com.au

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Debra Jeisman, Colin G Wilson, Kate Blood, Sheryn Pitman.

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> A mediterranean place, a mediterranean garden

Hot, dry summers and mild, wet winters. Searing north winds carry the scent of the bush and a warning of the potential for fire. Sea breezes with a tinge of salt bring much awaited relief. These features are typical of a mediterranean place.

The plants in this garden are from the five mediterranean climatic zones:

- the South African Cape
- the Mediterranean Basin
- Central Chile
- California
- southern South Australia and south-western Western Australia.

Each of these five places is located between 30 and 45 degrees latitude on a west or southwestern coast with cold, offshore currents. These geographic conditions give mediterranean places a characteristic climate. They average roughly 25–100cm of rainfall a year which falls mostly in the winter and varies greatly from year to year.

The plants that live in these places are well adapted for climates just like southern South Australia: seasonally dry, with mild climates and frequent fire. Many of them have features that enable them to conserve water during dry times and take advantage of the rain when it falls.

As you discover the diversity, resilience and beauty of these plants, look at the forms that enable them to survive and thrive in their mediterranean landscapes. We hope that as you wander the garden you will learn about these plants and their environments, the connections they have with people from different cultures and how they can help us live more sustainably in our environment.

Water is just one factor you should think about when designing and caring for your garden. A truly sustainable garden will not only be water-wise it will also:

- Use only non-weedy plants. Many mediterranean plants can become weeds when planted inappropriately.
- Check what is suitable for your area.
- Provide habitat for local native fauna such as birds, insects and small animals.
- Use minimal pesticides and other chemicals.
- Avoid the use of materials and products such as rocks or wood collected from a wild landscape.
- Uses minimal fuel powered energy in its construction and maintenance.

> Protecting our environment

Check with SA Water about water restrictions:

visit www.sawater.com.au or phone 1800 130 952.

- Avoid watering in the warmest part of the day to prevent evaporation.
- Water the roots of plants and not the leaves.
- Water your garden less often but more thoroughly.
- Use a trigger hose instead of leaving the hose running.

For more information about sustainable gardening, contact the *Sustainable Landscapes* project through the Botanic Gardens of Adelaide. Pick up a brochure from the Visitor Information Centre or visit the web site, www.environment.sa.gov.au/botanicgardens/sustainable, to find out how you can create your own sustainable park or garden.

> Sustainable landscapes

There are also some useful books that can help you grow a mediterranean garden. Some suggestions to get you started are:

Gardens of the Sun (1996), by Trevor Nottle.

Mediterranean Gardening: Published by Timber Press.

A Waterwise Approach (2002), by Heide Gildemeister. Published by University of California Press.

Get the most from your water

- Look after your soil
 - Use a paving material that lets water soak through.
 - Set up shade areas and wind breaks to minimize evaporation.
 - Group plants with similar water needs together.
 - Install rainwater tanks. These can be used for watering your garden, washing the car or connecting into your household plumbing. (For more information please check with your local government authorities.)
- Look after your soil
 - Use products that hold water near the roots of plants, and allow better water penetration.
 - Use a compost bin. Compost will improve your soil temperature and improve soil structure.
 - Prevent soil erosion, even out variations in soil as 73% evaporation loss, mulch can reduce weeds, as 73% evaporation loss, mulch can reduce weeds, as much
 - Mulch thoroughly. As well as preventing as much
- Use an appropriate irrigation system that you can monitor and adjust to suit the weather.

> An elemental connection

For many thousands of years, water and fire have shaped the landscapes and plants of the world’s mediterranean regions. Let this garden guide you in exploring the variety of adaptations that have resulted from the impact of these elements. Look for features that help these plants survive.

> Water

Water is largely ephemeral in mediterranean landscapes – it falls, some soaks into the soil, some runs off, pools for a while and evaporates into dry air. Plentiful in winter, it can be scarce in the long, dry summer.

Plants have developed a range of features and adaptations to make the most of water. They include:

- waxy or hairy leaves
- leaves that are tough, with a thick coating
- leaf orientation to minimise sun exposure
- being drought-deciduous – dropping leaves in dry times
- bulbs or other underground structures to store water
- reduced leaf area to decrease water loss
- completing their life cycle quickly – annuals that survive summer as seed
- leaves pale in colour to reflect light and heat.

> Fire

South Australians are all too familiar with the effect of fire on landscapes, vegetation and wildlife. Although it can be devastating to our communities, fire is an essential feature of a mediterranean place. Mediterranean plants have evolved to survive and even thrive with fire.

Over time, repeated burning changes the types of plants and plant populations. Fire favours some plants. For instance, some plants produce seeds or seed-pods that require intense heat to trigger seed dispersal or smoke to promote germination.

Other plants are able to re-sprout after fire from substantial roots buried deep or from dormant buds protected by thick bark.

These plants are able to take advantage of the fertile, ash-covered soil and the lack of competitors to thrive. There are instances where plant species thought lost have reappeared after bushfire.

> Scarcity, abundance and threat

The five mediterranean regions occupy less than five per cent of the earth’s surface but contain almost 20 per cent of the world’s total plant species. This biological diversity is second only to the tropical rainforests.

As well as being some of the most biologically diverse places in the world, mediterranean regions include some of the areas of greatest risk. Mediterranean plants dominate the rare or threatened plant lists. Over a third of Australia’s rare and threatened plants are from the mediterranean zone.

Mediterranean environments are attractive places to live and so tend to suffer from land clearance for agriculture and urban development.

The often-linked problems of endangerment of native species and weediness of others are a continuing challenge. Many of our most serious weeds have come from other mediterranean places: blackberry, olive, boneseed, bridal creeper. Plants introduced here from other mediterranean zones can thrive in their new environment without natural predators, and pose a significant problem. Likewise, some Australian plants have become weeds in other mediterranean zones.

“A weed is a plant that is not only in the wrong place, but intends to stay.” Sara Stein

> People, plants, culture

People have always relied on plants. The plants represented in the SA Water Mediterranean Garden are used for food, shelter, medicine, tools, adornment, and amusement. Many plant uses of today have been practised by human cultural groups for millennia.

Agave, aloe, carob, fennel, geranium, lavender, olive, poppy, rosemary, saffron, sage, salvia, thyme – some of our favourite herbs and spices are from the mediterranean regions.

Plants from mediterranean zones can become weedy when introduced into a place free from their natural predators.

> Did you know?

Nerium oleander, oleander, from the Mediterranean Basin, although a common garden plant is a plant to treat with extreme caution. The sap contains a powerful cardiac toxin if ingested. Its bitter taste means that poisonings are not very common though. It can also be a strong irritant to the soft tissues (eyes, mouth), so take care when pruning.

In South Africa ailments such as coughs, colds and infections are treated with the licorice plant *Helichrysum petiolare*. This plant has its own built-in insecticide so makes a sweet bedding material.

In Australia, *Eremophila*, the emu bush, is used in traditional medicine to treat sore throats and respiratory infections.

> Garden design

The SA Water Mediterranean Garden has been carefully designed to illustrate the stories of mediterranean places.

Geographical drifts

Here you can see the plants in geographic groupings with a sense of their wild origin. The plants heights gently rise and fall in waves in varying shades of green, giving you a sense of a wild landscape.

Interpretive spine

The garden beds within the interpretive spine tell the stories of mediterranean plants, people and places.

Interpretive beds

The four interpretive beds each focus on one key theme of the SA Water Mediterranean Garden: fire; water; threats; plants, people & culture.

Diversity beds

In each of the diversity beds, you can see the plants grouped according to their country of origin. Each of the five mediterranean zones is represented and there is a bed called ‘fusion’, which contains plant cultivars bred from plants from each of these places.

Water rill

The central rill reminds us that water is central to our lives. It symbolises the transient yet pivotal role of water in the landscape and our lives. The garden design – particularly the water rill – is reminiscent of the gardens of the Alhambra Palace, built by the Spanish Moors around the 14th Century. Moorish garden design emphasises the interplay of light and shade through moving water and the sacred principles of balance and cyclical movement in the universe.

