

Success with Succulents



Text by Janet Hill based on information provided by Jackie Warburton (President of The Cactus & Succulent Society of the ACT) & Attila Kapitany (Immediate Past President of The Cactus & Succulent Society of Australia). Photos: Peter Hill

OGA visitors to the garden of Jackie & Brett Warburton at Oxley in early May this year could not help to be impressed by the cactus and succulent collections displayed to such good effect.

Maybe those displays have led you to investigate how to establish your own cactus and succulent garden? The following information and advice is provided to assist you in doing just that!

Attila Kapitany has noted that Australia can claim round about 400 native species that can be regarded as succulent plants, though there are no cacti native to Australia. Succulents can withstand long dry periods due to their ability to store water in their stems and leaves. This process is

described as Crassulacean Acid Metabolism (CAM). When the daily air temperatures drop to a cooler level at night, the stomata in the leaves open and absorb carbon dioxide. Conversely, during the heat of the day the stomata are closed, thus reducing the loss of water through transpiration and resulting in the storage of moisture for when it is needed.

The provision of light and sun are two very important aspects to consider before planting out succulents in garden beds or grouping them in pots around the garden to show off special features. Some species prefer the shade, but most require a sunny position. Many cacti are slow growers and are more tolerant of hot and dry conditions, whereas most Canberra-grown succulents need to withstand the extremes of temperature experienced here – hot summers and the long, cold and frosty winters.

Growers can take several measures to ensure that the succulents are protected from the elements, especially over winter. A major priority is to improve the micro-climate. For example, install physical barriers to disrupt the cold air flow. Products such as cardboard, frost cloth or bubble wrap, supported above and around the plants, can be effective plant protectors. The most damaging time for succulents occurs when plants are wet before the frost hits, because rot can then set in. Frost protectant and anti-transpirant sprays can, according to the manufacturers, substantially reduce moisture losses and eliminate sun and windburn damage as well as increase frost tolerance.

Areoles are small protuberances and fluffy-like buds found on cacti stems from which the flowers and new growth form. In their natural habitat most flowering cacti have their flowers pollinated by bats and moths. Some cacti flowers may only last for one night. In Canberra the flowering of outdoor succulents and cacti largely occurs from November to February. If kept appropriately watered and fertilised, plants will grow well and produce flowers. Most succulents, including cacti, go into a dormant state in winter and during that time plants do not need fertiliser and should require very



Plant stall amongst the succulents during the Open Day

Jackie's succulent garden

Jackie was given her first cactus 15 years ago, and has been collecting ever since. The garden beds were built up with trailer-loads of sand plus ag pipe to provide good drainage. Some of the larger specimens came from the CIT Horticultural Campus when it relocated to Bruce in 2009. The succulents in her garden flower most spectacularly during November-January, and only require watering several times during the heat of summer and not at all in winter. Jackie even has a roof succulent garden on her shed!

little water.

Making new plants is quite easy. Many of the smaller succulents such as *Aeoniums*, *Echeverias* and *Sedums* can be readily propagated from short-stemmed crowns or even a leaf. Plants grow best in a slightly acid soil mix containing coarse washed river sand and well-rotted organic matter, which provides very good drainage.

Although taking stem cuttings is the preferred method, cacti can also be grown from seed. The warm soils of mid-spring and early autumn are ideal times to plant succulent stem cuttings in Canberra. The general advice is to leave the freshly cut succulent stems to callous over for about 3-5 days before planting. Mix a little slow release fertiliser into the soil before planting a third of the stem in the ground or pot. Water in lightly and keep the soil slightly moist. New roots will soon begin to form and you will have another plant!

Whether grown in the garden or in pots, ornamental gravels and stones can be used as decorative mulch around the plants. Once in place they require minimal maintenance, as they don't break down or lose their colour as wood-based mulches do. Not only are they aesthetically pleasing, but they also reduce variations in soil temperature, retard weed growth, and by preventing soil splash they also play an important role in plant hygiene.

Chapter 10 in the Horticultural Society's publication *The Canberra Gardener* (Tenth Edition) provides substantial information on the successful cultivation of succulents in Canberra and includes a plant list prepared by HSOC member, Brian Wray.

Another excellent resource is Attila and Michele Kapitany's website www.australiansucculents.com, as are a number of books Attila has co-authored.

Through their website www.cactusact.org.au, meetings and newsletters, the members of The Cactus & Succulent Society of the ACT (C&SS) share their experiences and specialist



knowledge after years of successfully growing these plants under Canberra's climatic conditions. Jackie Warburton, the C&SS's current President, is scheduled to give a presentation to HSOC members and friends at our Information Evening on 19 October. (Refer to 'What's On' on page 24 of this Bulletin).

Also C&SS members will be mounting a display of various types of succulents that grow well in Canberra at our Spring Exhibition & Rose Show on 14-15 November. This will provide another opportunity for us to connect with and learn from local growers. I look forward to seeing you at these events!

Photos above and the one immediately below: Magnificent specimens, some named, in Jackie's garden



Jackie Warburton pointing out special features of her succulent collections to OGA visitors