

Xeriscape Gardening

Climate change, global warming should make us all more aware of the need to use our precious water resource more efficiently. We should be conserving all we can especially in the way we maintain our lawns and gardens.

Xeriscaping is a way of gardening that all started in Colorado, where they experienced a severe drought in 1981, which had greatly limited their water supply and usage. The term xeriscape comes from the Greek word “zeros” meaning dry. And dry gardening has become the gardening philosophy for many areas in our province as well as many other provinces that experience drought conditions. Xeriscaping refers to conserving water and using drought tolerant plants, working with the climate and soils rather than against them.

There are many benefits to this xeriscape concept. First and foremost water conservation by 50-75% on the average for most residential landscaped. Maintenance is minimal if all the correct steps are taken in preparation of the xeriscape. Fertilizer and pesticide use is eliminated by the use of native plants to the area, and also the use of organic soil amendments to ensure that the nutrients will be provided to all of the plants selected. A well designed and planned xeriscape can also raise property values especially if it looks great and requires little maintenance who wouldn't be in favour of that. Since limiting water use means reducing the lawn areas, fossil fuel consumption from gas mowers is minimized or eliminated altogether since small areas of lawn can be reel mowed. Lastly, by incorporating native plants to the landscape wildlife will be provided with a familiar habitat that will encourage a healthy species.

How do we achieve a xeriscape garden?

Simply by following the 7 principles of Xeriscaping:

1. **Planning and design-** Water conservation is the important element in the xeriscape design. Proper planning and design will create a functional and appealing landscape. Garden topography, exposure and soil of the site must be considered, work with the area rather than against it. Create planting zones and group plants together according to their needs. Tough drought tolerant plants in areas of full sun, not so tolerant plants in partial shade and delicate

demanding plants near a water source. Make use of the microclimates within the landscape this will help establish and determine the watering needs of those areas

2. **Plant selection-** The right plant in the right place. Group plants together that have similar needs. Don't mix sun and shade loving plants in the same planting area, they require different watering needs. Drought resistant plants are characteristically ones with smaller leaves, that are thick, glossy, silver-grey or fuzzy which help them conserve water or consume less water. Always consider the ultimate size of the plant in a few years, how much pruning and maintenance are you willing to do. Plant trees or make use of the existing ones because they shade the soil to keep it moist and cool on hot summer days, and also block the sun and wind which helps reduce evaporation. Plant annuals at least 12 inches (30cm) apart and perennials 18-24 inches (45-60cm) apart. Crowding plants too close together can result in water competition. **A few plant suggestions** to include into design might be, Gaillardia x grandiflora (Blanket flower), Echinacea spp. (Cone flower), Hemerocallis spp. (Daylily), Lavandula spp. (Lavender), Achillea millefolium (Yarrow), Gazania and many species of Sedum. There are also some grasses to include such as Miscanthus sinensis 'Gracillmus' and 'Zebrinus'. Shrubs to include, Cercis chinensis (Chinese Redbud), Pinus mugo (Mugo Pine), Kerria japonica (Japanese Kerria), Cotinus coggygria (Smoke bush). Trees to consider, Magnolia stellata (Star Magnolia), Abies spp. (Fir), Pinus nigra (Black Pine), and lastly Cedrus deodara (Deodar Cedar). There are many more plants that are suitable to xeriscaping especially if they are given the initial care to become established. Some of the plants native to British Columbia include, Potentilla fruticosa (Bush Cinquefoil), Mahonia aquifolium (Oregon Grape-Holly), Arctostaphylos uva-ursi (Bearberry), Juniperus communis (Common Juniper) these are just a few of the many plants that are available at most local and out of town nurseries, such as Dry Valley Nurseries in Kelowna, B.C.
3. **Soil-** Amend soil with an organic material such as compost, well rotted manure or peat moss. Clay soils as well as sandy soils should be amended in order to improve their texture and capabilities. A sandy soil which is well drained will dry out more quickly, and any nutrients available will be leached before the plant can use them. By mixing humus into the soil the water-holding

capacity will be increased as well as nutrient absorption by the plant. Clay soils on the other hand are also considered to be heavy soils therefore making them poorly drained and nutrients are usually held in the soil particles making them unavailable to the plant or at very slow rates. Also water that does not drain away from the root zone of plants can cause problems or death if not amended with an organic base material, to improve water penetration of the soil.

4. **Mulch-** Using mulch on the surface of the soil around the plants helps to retain the moisture in the soil and reduce the need for water by as much as 40%. An organically based mulch will also provide nutrients as it decays, as an added bonus to the plant. Not only does mulch reduce the soil temperature, help eliminate weed competition, but also reduces moisture loss due to evaporation. Adding approximately 2 inches (5cm) to garden beds will provide much needed protection, water and nutrient requirements and a finished appearance to the garden beds.
5. **Lawns-** As beautiful as they are, they are the most demanding consumer of water and nutrients. Lawn areas should be cut back in size wherever possible. How much is really necessary? When planting a new turf area choose a cultivar that is appropriate to the climate, site, level of maintenance and the intended use of the area to conserve water consumption. Fescue blends have good heat and drought tolerance but also have a more course texture and appearance. They are drought tolerant because of their very dense root system and ability to roll their leaves during dry periods, as a result less water loss due to transpiration.
6. **Water-** wisely and efficiently and pay special attention to soil type, plants, and water restriction days. Water deeply and less frequently in the morning and when it is not windy especially in the afternoon. In the garden, water at root zone level, overhead watering causes water lost to evaporation and can lead to fungal diseases in the plants. Install drip irrigation if needed for garden beds, they are the easiest and most efficient.
7. **Maintenance-** Once garden is completed you must take the time to maintain it. There really is no maintenance free garden, a xeriscape garden comes close, but in order to enjoy the initial installation appearance, the odd weed or tired plant has to be dealt with.

Is xeriscape gardening for you? Or will it be forced on us due to population growth, water supply and tougher restrictions. There are more positive aspects that certainly outweigh any negatives. Xeriscaping conserves water, requires minimal maintenance, little or no fertilizers, improves property values, causes no pollution and provides habitats for wildlife. All of this for the price of conserving water in our landscapes.