## Introduction to Xeriscape Gardening by John Waddington

#### Xeri - pronounced zery - from the classical Greek root xer, meaning dry.

Xeriscape gardening, water-smart gardening, dryland gardening - these all mean much the same thing: using fewer resources while still having a good-looking yard. Is this possible in the Okanagan? You bet!

#### Do you want a zero-maintenance yard?

Zero maintenance is tough to reach. Even concrete painted green needs some maintenance, but we can show you garden plantings which look great but don't need the pampering that an irrigated yard needs.

### Do you want flowers in your yard starting in early spring and not ending until late fall?

We have trees, shrubs, perennial and annual flowering plants that cover the entire growing season and don't need lots of water every week. Of course, most don't flower continuously for the whole growing season. You really didn't expect that, did you?

#### Are you tired of watering, fertilizing, mowing your lawn every few days?

We have a couple of grasses that don't need any of this. OK, so they don't stay green all winter. Nothing is perfect.

# Are you ready for a new adventure in gardening, in learning more about plants and their place in your environment? Something you can do a bit at a time at your own speed?

This is what the xeriscape approach is all about: using plants in your garden that fit better into the local environment rather than being a drain on water resources and a potential source of overuse of fertilizer and pesticides.

## Do you have to re-engineer your whole garden to switch to this "xeriscaping"?

No you don't. You can change part of it. Maybe you have a problem area where your present maintenance isn't working well. Maybe you have an area that isn't very attractive in its present state. Eventually you may want to change your whole yard, but you can do it a section at a time.

You may already have some drought-tolerant plants that you didn't realize are drought-tolerant. There are two ways to find out. One is to stop watering. The

plants that die are not drought-tolerant, and you replace them with ones that are. This could take some years because water needs vary quite a bit, and weather also varies quite a bit from year to year, and your garden will not look very good while you are converting it.

The other, much better way, is to look up in a list such as the one on this web site, or check in a book to find which plants are drought-tolerant, then move the plants that need regular, frequent watering to another part of your garden and replace them in your new dryland area with new plants known to be drought-tolerant.

#### Is this stuff hard?

It is a sad fact of life that the introductory part of a new subject is the hardest part. You are learning new concepts, new words, new meanings. It's the old learning curve: steeper at first, easier later. Still, this is not rocket science. Most plants are quite adaptable and give you lots of warning when all is not well with them. And gardens are often somewhat of a "work-in-progress". Plants die, get too big, don't do what you thought they would, or would look better in some other part of the garden.

If you are going to turn to xeriscape gardening, you do need to know a bit more about plants and soils than the "water every three to four days" that is adequate when you have irrigation. There are lots of books on xeriscape gardening now. Your library and bookstores will have some of them. If you have an internet connection, there is lots of information there.

There are seven principles of xeriscape gardening, and we have aspects of them them here. There is more detail on the individual pages reached via the links at the bottom of this page:-

**Planning and Design** First, you decide how much money you wish to spend on your landscaping. Then you can plan the garden arrangement yourself or bring in a professional landscape architect. If you do it yourself, you have some work ahead. You have to draw up the plans, set the grades and slopes, decide what plant goes where, find where you can get the plants, buy them, plant them and water them. Yes, even dryland plants need to be watered for the first year. Your design might be better or worse than a professional's, but it is yours, and it doesn't have to be done all in one season.. If you hire a professional, you need to decide how much of the work he (or she) will do, and how much you will do. The professional can supply any part or all of the work, though some may insist on doing the entire project.

**Soil Analysis** Soils are either good or bad. The bad ones are extreme types. Heavy clay cannot absorb water as fast as the lowest setting on your sprinkler will supply it, and stays wet and sticky for days after. Dune sand can absorb water faster than your sprinkler can supply it and is dry an hour after you turn the

water off. Silt blows away when it's dry and has no load-bearing strength when it's wet. The good soil, called loam, has about equal proportions of each and a few percent of organic matter: 5% is good, 10% is wonderful, 20% is too much. The reason that loam soil is the best is that it has the best balance of water absorption, water holding capacity, water drainage and nutrient supply.

Plant Selection A few years ago, finding dryland plants was nearly impossible. Now, the local garden supply places are more likely to have drought- tolerant plants, and there are a few specialists in the valley selling only xerophytic (dryland) plants. Read books, consult plant lists, talk to xerophyte gardeners, come to see the Summerland Gardens xerophyte plant section. If you have the skill and endurance, try growing your plants from seed. Some is available locally: more can be purchased on the internet. Many dryland species have a very low germination. Presumably they await ideal conditions which rarely turn up in their native habitat, so in the meantime they have ways of staying dormant, which we haven't figured out how to break on demand.

**Turf** There are two grasses suitable for dryland turf areas. Both are native to the prairies.

Buffalograss is uncommon in the Canadian prairies, plentiful in short-grass prairie in the USA. It is 15-20 cm (6-8 inches) high, flowers and all. (need picture) It sends out runners like strawberries, and forms a thick turf quite quickly. It greens up in May and tries to take over the rest of your garden in June and early July. Lawn edging doesn't work: the runners go right over the top. It stops growing when it runs out of water, and turns brown in late September. It prefers clay soil.

Blue grama is a bunch grass (grows in clumps) common in southern Saskatchewan and Alberta. The leaves grow about 15 cm (6 inches) high, and thin stems carrying two comb-like seed heads stick up another 15-30 cm. (need picture)

Usually buffalograss is seeded alone or in mixture with blue grama. Once established, no fertilizer and little or no water need be applied, particularly if they are growing on clay soil. Mow them once or twice a year, or not at all.

Irrigation This is the tricky one. How much and when depends on your plants and your soil. Some plants need some water some times. Others can get by on whatever comes out of the sky. And it also depends on your soil texture. Sandy soil holds less water than clay soil. Maybe you can use water from your house roof. The trick is distributing it. Do you have a rockery? Remember, if it is 50% stone, the plants between the stones get twice the water from rain: the regular amount directly and the same amount as runoff from the stones. The usual advice is to group together plants needing the same amount of watering so you end up with zones each planned for different water requirements. Also, if you water infrequently but for a long period each watering, you encourage the plants

to send their roots deeper into the soil which makes them more drought-tolerant.

**Mulches** Loose material covering the soil surface to a depth of 7-10 cm (3-4 inches) breaks the impact of raindrops and runoff on the soil and slows down evaporation from the soil surface. All water in the soil has to go through the plants so it lasts longer. You can use pea gravel but most people use something organic, so that when it breaks down it goes into the soil. Wood bark chips, nut shells, (wine corks? - just the real ones, none of this plastic stuff), chopped-up wood or pine cones, shredded prunings, etc.

**Maintenance** Yes, there is some. There are weeds that live in dry areas. Also, if you don't deadhead your ornamentals after they finish blooming, their seeds will happily establish in any open spaces in your garden and, surprisingly, under other plants. After all, they are adapted to establishing in dry areas. However, establishing a seedling in soil which is dry most of the time is a tough business, so you won't get as many volunteer plants, be they weeds or escaped ornamentals, as you do in a fully watered yard.

There is still the usual pruning of shrubs and trees to get or keep an attractive form. Some dryland shrubs have a surprisingly high maintenance requirement if you wish to keep them a certain shape. There is still the decision of whether to cut off the herbaceous perennials in the fall, or wait until spring.

Do you like ants? There will be lots in a dry garden. How about grasshoppers? You will have some of these too, although they become most noticeable late in the season when they are fully grown.

Well, there are the seven principles of xeriscape gardening. Is it different from fully-watered gardening? Not very. You are using less water, less fertilizer, less lawn mowing, and less pesticide. And a different set of plants. But you still have a garden that is attractive year-round. A pleasure to walk past, to look at, to be in.