# Water-wise gardening

## Xeriscaping can wean your landscape off the wet stuff

Xeros is a Greek word that means dry. Xeriscape gardening is the planning and development of a landscape that uses little additional water to maintain its environment.

It can be applied to any landscape design, from formal to informal.

Although it may take two to three years to establish, a xeric landscape aims to reduce the amount of water being used.

Seven water-saving principles of xeriscaping are outlined below.

### A yard divided

A good plan divides the yard into three water usage zones: high (regular watering), moderate (occasional watering) and low (natural rainfall only).

**1. High water zone**

This zone is a small, highly visible and highly maintained area, such as around a patio, where plants are watered regularly in the absence of rainfall.

**2. Moderate water zone**

Plants are watered only when they show signs of moisture stress. Newly planted ornamental plants and turf grasses require regular irrigation during the establishment period, generally eight to 10 weeks after planting, regardless of their intended zone.

**3. Low water zone**

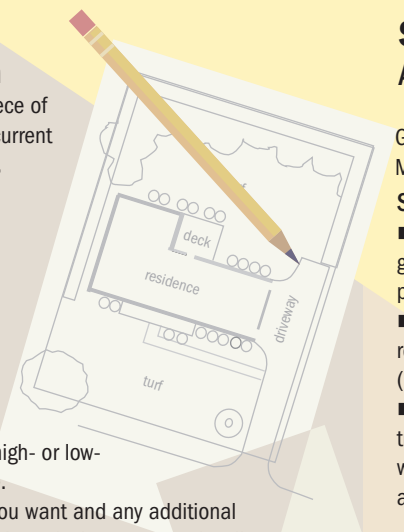
Plants are watered by natural rainfall and receive no irrigation. Once established, many types of plants grow well in this zone.

## THE SEVEN PRINCIPLES OF XERISCAPE GARDENING

### STEP 1

#### Planning a design

Take a pencil and a piece of paper and sketch your current site, including buildings, driveways and existing vegetation. Note the orientation to the sun.




**Consider:**

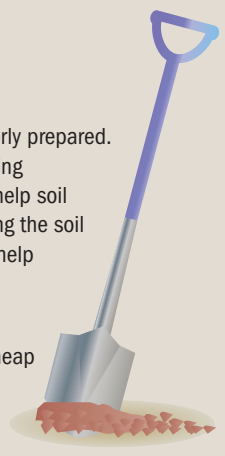
- How long you plan to live in the house.
- How much you want to spend.
- Whether you want a high- or low-maintenance landscape.
- What type of plants you want and any additional hardscape materials such as decks, patios and walkways.

Identify problems and potentials. List needs and wants to be incorporated into the plan. A good plan divides the yard into water usage zones: high (regular watering), moderate (occasional watering) and low (natural rainfall). It also incorporates shade and appropriate plant selection. Now, lay a piece of tracing paper over the sketch and note where plants will be located and the placement of water and shade zones.

### STEP 2

#### Soil analysis

Soil will retain more moisture if properly prepared. In high and moderate water zones, adding organic matter, compost or leaves can help soil retain moisture. In low water zones, tilling the soil will open it up to moisture and air and help roots develop better.



#### Composting

Building and maintaining a compost heap will replenish your soil's nutrients and maintain moisture in the garden.

Compost may be bought or made.

Put the right type of materials in the heap.

They include:

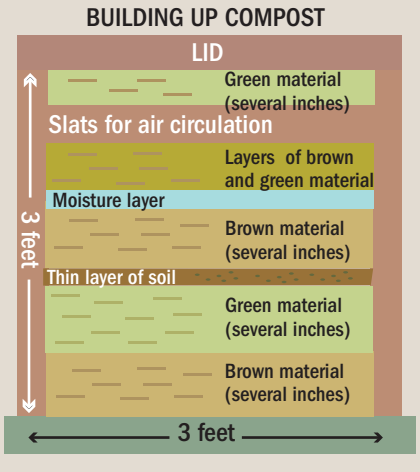
**1. Carbon-rich "brown" materials**: leaves, straw, dead flowers and shredded newspaper.

**2. Nitrogen-rich "green" materials:** grass clippings, plant-based kitchen waste (vegetable peelings and fruit rinds, but no meat scraps), barnyard animal manure.

**3. Garden soil:** A heaping shovelful.

Find a container or site that's at least 3 feet long by 3 feet wide.

**BUILDING UP COMPOST**




Layer material as shown in the diagram. Every couple of weeks, use a shovel to mix the rotted material to the center of the bin or pile. Keep the compost material moist, not wet. Air should circulate through the pile, or compost material can turn to slime and be useless in the garden. Good compost is brown/black and crumbly with a sweet, woodsy smell.

### STEP 3

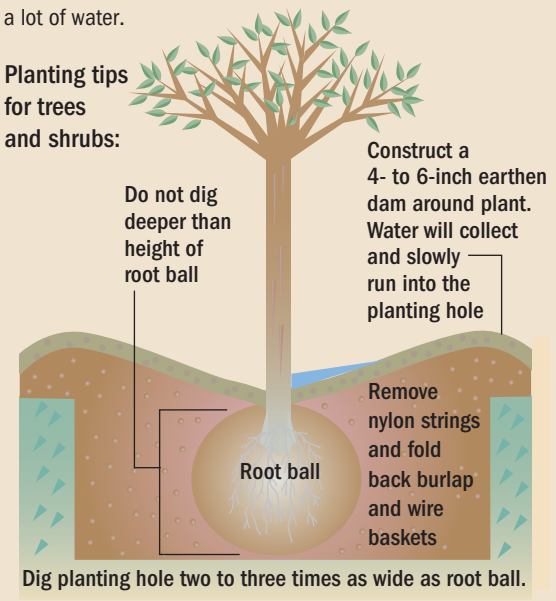
#### Appropriate plant selection

Consider the design of the planting site when choosing plants. Group plants with similar soil, light and watering requirements. Many varieties of plants will fit in a xeric landscape.

**Some steps for choosing plants**

- **Mature size and form:** Consider the plant's scale as it grows; control overgrown plants that will compete with other plants for nutrients and moisture.
- **Plant health:** Look for well-developed roots throughout the root ball and for an abundance of small white roots (absorbing roots) on the outside of the root ball.
- **Color:** Add color to the landscape with flowering trees, shrubs and perennials. Use ground covers with variegated leaves instead of annuals, which take a lot of water.

**Planting tips for trees and shrubs:**




Dig planting hole two to three times as wide as root ball.

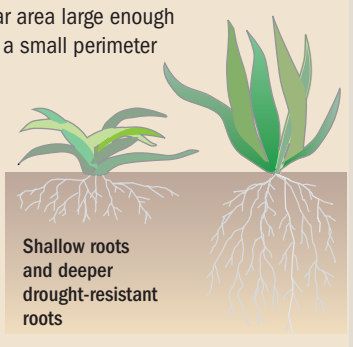
### STEP 4

#### Turf planning

Turf provides a play area for the yard. It also controls erosion and absorbs heat, cooling the environment around it.

**When planning the turf area:**

- Designate a rectangular area large enough for practical use but with a small perimeter to conserve water.
- Limit watering to high-visibility, high-impact areas.
- Use drought-tolerant covers or mulch instead of turf on slopes or areas that are hard to mow.
- Never water turf daily unless you are trying to establish it. Daily watering will encourage shallow root growth and reduce the turf's drought tolerance.
- Divide watering sessions into 1-inch applications once or twice a week to maintain health.




**Varieties of grasses used in the Piedmont region and their drought tolerance:**

| GRASS | SHADE | HEAT | COLD | DROUGHT | WEAR |
|---|---|---|---|---|---|
| Bermuda grass (common) | Very poor | Very good | Very poor | Excellent | Excellent |
| Centipede grass | Good | Good | Poor | Good | Poor |
| Kentucky blue tall fescue | Good | Good | Very good | Very good | Very good |
| St. Augustine | Very good | Very good | Poor | Good | Poor |
| Tall fescue | Good | Good | Very good | Very good | Very good |
| Zoysia grass | Good | Very good | Fair-good | Excellent | Good |

### STEP 5

#### Efficient Irrigation

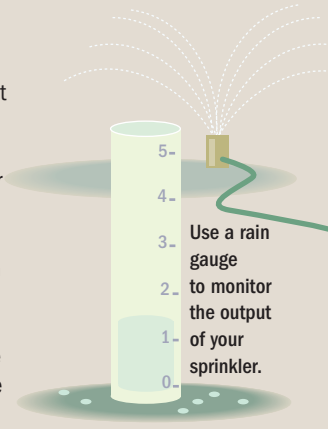
Xeric landscapes need good irrigation in the first few years to establish the root systems of plants.

**Water wisely**

Plants wilt when they need watering. If wilting continues into the evening, water the next morning. Some plants wilt during the heat of day and recover later.

**How much to water?**

Once established, most plants, trees and shrubs need little watering. This usually takes about three years from the initial planting time. To water, moisten the soil 10 to 12 inches deep for shrubs and 6 to 8 inches deep for annuals, perennials and ground covers. As a guide, 1 inch of water wets the soil to a depth of 6 inches. A small shovel may be used as a probe to determine how much water is saturating the ground.




Use a rain gauge to monitor the output of your sprinkler.

**How to water**

Sprinklers and drip irrigation systems are the best methods for watering. Sprinklers are better for lawns. Drip irrigation (plastic tubing placed below or above the ground surface) is best for watering plants. With both systems, watch for runoff, and avoid watering streets and sidewalks.

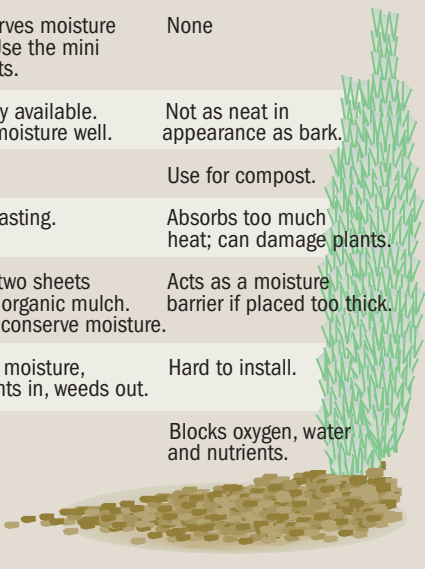
### STEP 6

#### Mulching

Mulch provides a cover for soil, keeping it moist and preventing evaporation. Mulch also controls weed growth and erosion.

**Types of mulches and how they are used:**

| TYPE | ADVANTAGE | DISADVANTAGE |
|---|---|---|
| Pine straw | Excellent for water conservation. | Flammable when dry. Decomposes quickly. |
| Pine bark | Conserves moisture well. Use the mini nuggets. | None |
| Leaves | Readily available. Hold moisture well. | Not as neat in appearance as bark. |
| Grass clippings | None | Use for compost. |
| Gravel | Long lasting. | Absorbs too much heat; can damage plants. |
| Newspaper | Layer two sheets under organic mulch. Helps conserve moisture. | Acts as a moisture barrier if placed too thick. |
| Fabric | Keeps moisture, nutrients in, weeds out. | Hard to install. |
| Plastic | None | Blocks oxygen, water and nutrients. |



### STEP 7

#### Maintenance

All landscapes require some maintenance, but proper planning and design make it more efficient.

**Things to do:**

- Control weeds. They take water intended for plants.
- Reduce fertilizer applications. The more a plant grows, the more water it needs.
- Remove poorly growing plants that consume time and water.
- Avoid heavy pruning. Plants that are left alone require less water to maintain themselves.

Source: City of Greensboro; N. C. Cooperative Extension Service; University of Georgia College of Agricultural and Environmental Sciences; "Xeriscape Gardening" by Connie Ellefson, Tom Stephens and Doug Welsh.

RESEARCH AND GRAPHIC BY **MARGARET BAXTER**/News & Record

**A CLASS ON XERISCAPING WILL BE HELD 7 P.M. MARCH 14 AT THE AGRICULTURAL CENTER. THE PROGRAM IS FREE AND OPEN TO THE PUBLIC. CALL 375-5876 FOR INFORMATION.**