

Low-water-use zones in the landscape

If you can group plants by water requirements at the design stage of a landscape, you'll end up saving clients water.

■ You don't have to turn to desert plants to conserve water, says Ray Rothenberger, an extension agent for the University of Missouri-Columbia.

To make landscapes more water-efficient, you need to group plants into at least three major water-use areas based on yearly water needs, Rothenberger says. These zones will fit most sites, but some landscapes will use only one or two. The idea is to keep the zones separate so that only the water necessary is used.

Low-water-use zones in the landscape receive no additional watering after plants are established. Natural rainfall is the only water source, even during a drought. Plant examples for this zone include native perennials and shrubs such as forsythia.

"A good way to determine which plants will endure in a landscape without extra water is to observe the native plants," Rothenberger says.

In the moderate zone, water is added during establishment and drought stress. Plants selected for this zone, Rothenberger says, should be drought tolerant, such as needled evergreens.

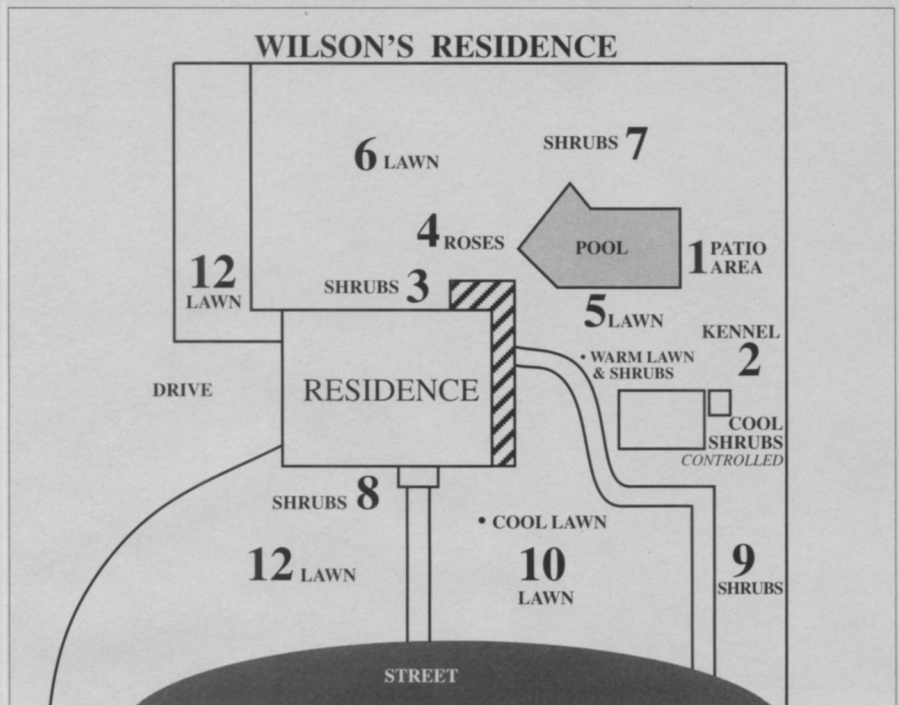
Plants located in the high-water-use zone are watered when needed. In this zone, plants are selected for special needs or hobby interests of the residents. Without regular watering, these plants will not survive even minimal drought stress without damage, he says.

Rothenberger suggests that these high-use areas be focal points in the landscape and kept green and attractive at all times. Examples include azaleas, rhododendrons and annual flowers.

Rothenberger says plants in the high-use category need an inch of water a week; in 80-90 degree weather, two inches of water is needed. "This is rainfall and watering for total watering, so a rain gauge is important," he observes.

"If overhead sprinklers are used," he continues, "scatter some large cans around to gauge the time it takes the sprinkler to fill an inch.

"If you get some run-off, stop for a



Breaking up a client's landscape into 'hydrozones' can help solve irrigation problems. Further refinement can be made by 'grouping' plants according to water requirements when designing the property.

while and let the water soak in. After a couple of times, you'll know roughly whether it took an hour or two hours to accumulate that water that is needed."

Generalizations about soil are hard to make because there are so many different types, slopes and infiltration rates.

"People have done this for a long time, but we have had a number of droughts and the rainfall continues to be erratic," Rothenberger notes. "So the people who prepare will have less expense and lose fewer plants. A well-planned, water-efficient landscape will better survive without spending a lot of time and money watering."

The same principles can be used in determining "hydrozones" of your clients' landscapes, according to Marsha Prillwitz of the California Department of Water Resources.

"Grouping plants together in a hydrozone area is one way to save water in the long run," she says. "We have very little scientific data on plant water needs. But we do have very good data on turf and we know native plants don't need any supplemental irrigation."

Going native in urban landscapes

■ A native plant is any tree, shrub or flower that occurs naturally in a region and is ideally suited to grow there.

"When appropriately placed in the landscape, native plants will grow as they do in their natural habitat with a minimum of care," says Dr. John Frett, ornamental horticulture professor at the University of Delaware.

"If you're pampering a native plant, the most likely reason is an unsuitable location."

Examples:

● The beech tree does well in a woodland setting, but it doesn't stand up to the compact soils, foot traffic and concentrated car exhaust of populated areas.

● "The spiceplant grows well, requires little maintenance and provides a nice complement to trees and perennials" in Delaware.

● "Mountain clethra is another example of a hardy plant, which in winter displays its beautiful multi-colored, peeling bark, adding interest to an otherwise bare landscape."

● Though they are non-native to Delaware, the Norway maple, bridal-veil spirea and Chinese dogwood have thrived there for a long time.